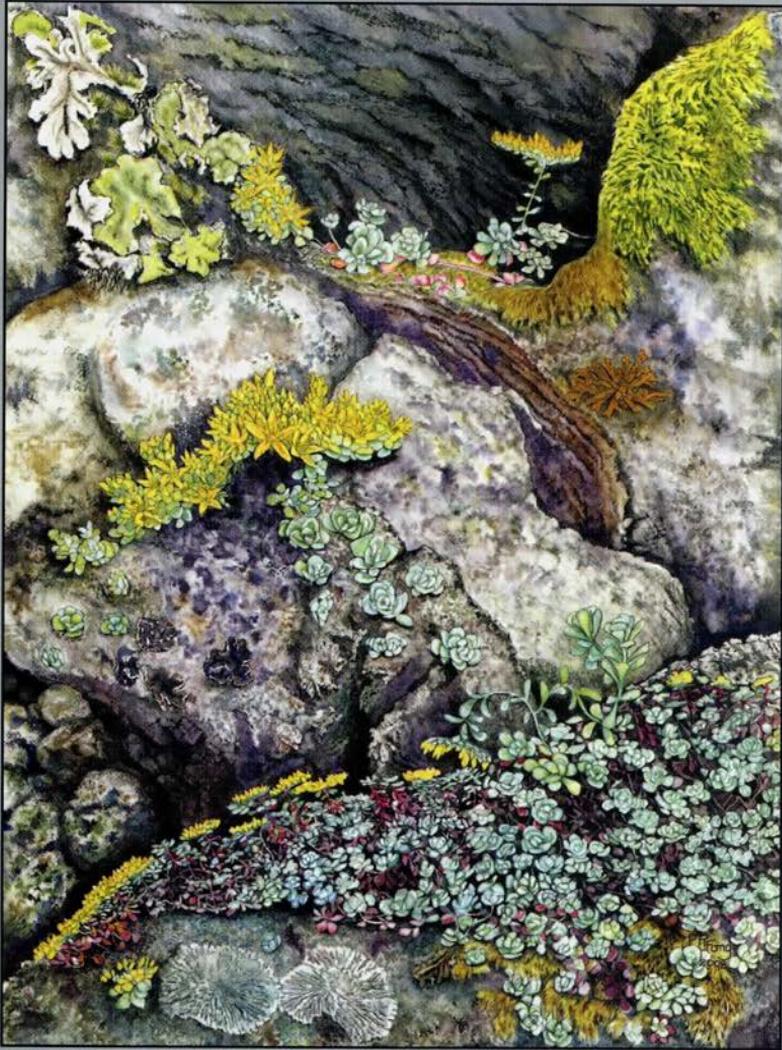


ROCK GARDEN *Quarterly*



Volume 67 Number 4

Fall 2009

Important Seed Exchange Information

The Seed Exchange Seed List will be posted on the NARGS.org website December 15. If you will need a printed copy, contact the Seed Exchange Director by **November 15**:

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Front cover: *Sedum* in Flower, Oregon. Painting by Paula Fong.

Back cover: Natural rock garden on Bjørnøya, Svalbard Islands, with *Polygonum viviparum*, *Saxifraga cernua*, two other *Saxifraga* species, and *Salix polaris*. Photograph by Juliet Mattila. See article, p. 227.

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ROCK GARDEN

Quarterly

BULLETIN OF THE NORTH AMERICAN ROCK GARDEN SOCIETY

Volume 67 Number 4 Fall 2009

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From the Editor

PLEASE TAKE A FEW MINUTES . . . Before turning to this issue's articles and photos, please go to the back pages and read important announcements in the *Bulletin Board* about the Seed Exchange, especially if you're sending seeds from outside the United States.

While you're back there, notice that the publicity and registration forms for the Eastern and Western Winter Study Weekends are now bound into the *Rock Garden Quarterly* rather than being (expensively) inserted as separate brochures. You can register for these highly enjoyable meetings using the forms in this issue, though other types of publicity will also appear during the fall. Two articles associated with the Western Winter Study Weekend appear in this issue, too.

Another bit of NARGS business you'll find there is an announcement from the Editor Search Committee that lays out their ideas for a new kind of *Quarterly* and requests that candidates for the paid position of editor contact them. If you're qualified, please consider this: I need to resign by around July 2010, because I'll be in the middle of moving to a new home and probably won't have office space set up for several months.

More business in the back pages: the NARGS Treasurer's report appears here each fall, as does the complete catalog of the NARGS Book Service.

Finally, you'll discover the annual index to volume 67. Remember that a cumulative index to the entire run of 67 volumes is now available from the editor on CD for \$5, and it should be available soon, if not by the time you read this, on the NARGS website: <http://www.nargs.org>

All right, now you're through the "business meeting" and can get to the "program." This issue offers a glimpse of the high Arctic from Robin Magowan, with Juliet Mattila's fabulous photos; an introduction to the native lily species of western North America; a moving tribute to the botanical artist Cindy Nelson-Nold; a biographical essay on the plant explorer Thad Howard; a portrait of a popular *Daphne* cultivar by equally popular plantsman Baldassare Mineo; and some excerpts from issues in a past that should be vivid, not dim, to us.

Plants of the Southeast Svalbard Archipelago

Robin Magowan,
with photographs by Juliet Mattila

In early July, we visited the southeastern and southern islands of Svalbard: Bjørnøya (“Bear Island”), Edgeøya, and Spitsbergen, which lie closer to the North Pole than to the Arctic Circle. Spanning 74° to 81° latitude, the Norwegian-administered archipelago is farther north than much of Greenland. Going ashore, walking in rubber boots on the spongy tundra, I felt as if I had been transported into the Ice Age, because Svalbard is still 60 percent glaciated. On the west coast of Spitsbergen, glaciers are halted by the warmth rising from the North Atlantic Drift, one of the last pulses of the Gulf Stream. On the east coast, the East Spitsbergen current is considerably colder, maintaining glaciers, fast ice (ice attached to the shoreline), and pack (floating) ice through much of the summer. The fresh water tumbling forth from melting snow and calving glaciers attracts the kinds of spawning fish that prefer salt-thin waters. The richness of sea life, in turn, supports enormous colonies of birds wedged within a few inches of one another like alpine flowers on their cliff-ledge condominiums (photos, pp. 239–244).

In the narrow shore zone between the glaciers and the Gulf Stream-fed waters a fascinating plant life exists, well adapted to its regime of freeze and thaw. The species are few in number, only 164 in the whole of an archipelago twice the size of Denmark (as compared to 500 to 600 in Tromsø, Norway, 10° of latitude to the south). The combination of nine or more months of heavy snow, strafing gales, very cool summers, and impenetrable permafrost dictates a community of dwarfs, many of which stand no more than 2 inches high—easy enough to overlook were they not so abundant and so colorful. All the same, what we see above ground represents only a tiny fraction of the total plant, 95 percent of which may lurk below ground in the form of roots and rhizomes.

Like alpine flowers, these high arctic species occupy their individual niches, determined by the presence of available humus and by the meltwater that leaches what few minerals there are out of a peaty, nutrient-starved soil. Where nutrients collect, however, at the foot of a bird cliff, on a ledge out of the wind, or by one or another animal lookout, a colorful plant life emerges.

Unlike most herbivores, Svalbard’s small, squat, white-and-gray reindeer snack on lichens, not higher plants. The reindeer, foxes, and bears leave droppings

among which plants can accumulate. Most of these plants grow as heat-trapping buns. The bun, with its closely packed flowering parts held in a flat or slightly domed circumference, serves as a kind of sweater or parka. Within, temperatures are much warmer than the air fiercely blowing outside (as much as 27° F/15° C). And the plant does not give up its leaves to the wind. Instead it retains the decaying matter, feeding on it and exploiting the extra warmth the rot provides. The low-lying, compact, hemispherical form works as well to deflect the wind, while allowing the plant to trap windblown particles and add them to its store of nutrients.

Svalbard's plants differ in their nutritional needs, and in their adaptations to the abrasive, desiccating wind. But, as with most alpiners, where they grow is determined by drainage. Along the shoreline, in wet marshy areas, one finds a community dominated by cottongrass (*Eriophorum scheuchzeri*) and sedges (*Carex* spp.). Farther up, on the rocky fells, appear the cushion plants familiar from our gardens—drabas, saxifrages, and *Silene acaulis*—that don't seem to mind feet constantly wet, as long as the water doesn't become stagnant. Others, such as *Dryas octopetala* and *Potentilla hyparctica*, seek sheltered nooks along the ridges on higher ground where their taproots can take advantage of the nutrients that have built up on deeper soil.

The shore tundra over which we squeak in our boots and noisy raingear is actually a minuscule forest composed of mosses, dwarf lichens, arctic willow, and least willow. The arctic willow normally flowers at the first snowmelt opportunity. On ice-surrounded Edgeøya we were greeted by a white-blossoming carpet all along the shoreline. We landed in a cove frequented by whalers and fur trappers from the 17th century through the 19th. Every hundred yards or so, as we gradually ascended, we'd come upon another 20-foot-long piece of bowhead whale skeleton, accompanied often enough by a great jaw. These freeze-dried skeletons were extremely old—probably several thousand years—the relics of whales that beached themselves when sea levels were higher after the great meltdown at the end of the last ice age.

Within each skeleton, out of the searing wind and nourished by slowly deteriorating bone and the droppings of predatory sea birds using the whalebone perch as a lookout, one could find as many as five different species of saxifrage: the gorgeous, purple-flowered *Saxifraga oppositifolia* that has given rise to so many garden hybrids; buttercup-like, reddish-haired *S. hirculus*; nodding, single-flowered *S. cernua*; green-petaled, round-leaved *S. hieracifolia*; and the tufted *S. cespitosa* (photo, p. 243), with its clusters of vivid blood-red stalks and lovely white flowers growing out of a green cushion (photo, p. 239).

As might be expected of an archipelago in which saxifrages comprise a full tenth of the entire flora, they are unusually distinguished. *S. cespitosa*, after all, adorns the cover of Malcolm McGregor's indispensable guide (see References). The reclusive *S. cernua* (photo, p. 242) with its striking reddish stem, baseball-mitt-shaped leaves, and single, beautifully cupped white flower likewise earns a full-page portrait prefacing McGregor's section of bulbiferous saxifrages. For all of *S. cernua*'s wide distribution in nature—it is circumpolar and occurs as far

south as Colorado and the Great Lakes, the Alps, and the Carpathians—it is hard to come by, as it doesn't set seed, but instead clones itself by means of the tiny bulbils growing along its stalks, which break off and are carried away by the wind. This is an excellent solution in a climate where plants may not have time to both flower and ripen seed; but, not setting seed, they lack the genetic diversity that would allow them to adapt to the occasional heat of our lowland summers. (It is suspected, though, that pollen from *S. cernua* can fertilize ova of other species, producing hybrid swarms.) Even above the Arctic Circle at Tromsø *S. cernua* is too weedy to make a satisfactory garden plant. The red stems and calyxes are merely one of many devices saxifrages use to generate needed warmth; without arctic conditions to chasten them, the stems can overextend and become leggy.

Among the bird droppings below cliffs we found two forms of the sailors' favorite scurvy-grass: the purplish-stalked, white-flowered *Cochlearia officinalis* and the more compact *C. groenlandica*, with spade-leaved rosettes of leaves that taste like vitamin C tablets. Here too, we found another edible, *Rhodiola arctica* (syn. *Sedum roseum*) or roseroot—the root is said to taste like a rose. Svalbard's only succulent stands out with its spherical form, closely clustered 8- to 10-inch tall blue-green leaves, and unusual orange flowers (in mainland Norway the same plant may feature dark maroon-red flowers) (photo, p. 240).

In the same shoreline vicinity were three species of *Ranunculus* sporting petals of golden yellow with green interiors—*R. nivalis*, *R. sulphureus*, and *R. arcticus*—identified mainly by the different heights of their flower stalks. Nearby we found fringe-petaled *Stellaria humifusa*, and on open gravel and more mossy areas its chickweed relative, *Cerastium alpinum*.

The frost "boils" created by constant heaving and thawing give rise to a patterned ground network of water-sorted rock circles or polygons, with the bigger rocks thrust to the perimeter. This strikingly patterned ground is dominated by good-sized mounds of *Silene acaulis*, whose taproots stabilize the soil to the benefit of the drabas and saxifrages. In Svalbard the moss campion goes by the name of "compass flower," because its pink flowers always bud in a south-defining arc: a useful indicator to any person wandering without a GPS. Petal colors of pink or dark blue indicate that bees are a plant's intended pollinators, just as yellow and white petals point to pollination by flies: good enough reason why one finds cushions of purple-flowered *Saxifraga oppositifolia* growing in the same vicinity as silenes. Together they make for a spectacularly colorful ground.

On the hill crests above the bird ledges, waving brightly in the gale as they turned to face the overcast sun, were vast colonies of the lovely whitish-yellow Svalbard poppy, *Papaver dablianum* (photo, p. 241). On Svalbard the great majority of the fly-pollinated plants bear white flowers rather than yellow ones—an indication of how generally overcast the sky is. Yellow may be a better reflector of light; but producing that yellow takes energy, and flowers may be better served devoting their energy to leaf and root growth, wider circumference, or taller stems.

I am used to measuring ecological health the way I measure that of my garden—by diversity. By these standards, an archipelago that features but a single

nesting songbird, the snow bunting, can seem more than a bit deprived. But what Svalbard lacks in species diversity it may make up for in abundance. A considerable richness is there, if you are willing to seek it out: under your feet, or down on your knees. Of course, as on most islands, the land diversity can't compare with that of the surrounding sea. The cliffs that lodge the sea birds also border a dense marine animals' storehouse thriving in the nutritious conditions. The relative abundance of cod—which seems permanently fished out in New England waters—can be measured by the 600 pounds our boat's kitchen crew hauled in on lines one afternoon. Several seal species feed on the cod, and the polar bears, at the top of the food chain, find the fat they need for high arctic survival by dining on the seals.

In early July the pack ice in southern Edgeøya was broken up, but still substantial enough to provide a hunting ground for the bears. In two days we were fortunate enough to come upon fourteen of them, all on the prowl for the three seals a week their sustenance requires. The presence of so many bears—3,500 on the archipelago—meant that we could not drop behind our hiking group to examine a *Pedicularis* in the gorgeous complex detail any arctic lousewort deserves. Nor was there a possibility of sitting on a large boulder in the middle of a tumbling cascade and distinguishing various saxifrages as I gingerly moved from one vantage point to the next. Even walking along the shore I couldn't tarry, lest a bear suddenly emerge from behind a rock or out of the ocean.

A score of seabird species nest on Svalbard, but only one songbird. On a 62,000-square-kilometer land mass, that says something about the conditions in which Svalbard's plants operate. In birds vision is the predominant sense. The lack of songbirds would seem to indicate then that an extraordinary set of eyes, or a vibrant song, may not be very useful. For much of the day the archipelago is wreathed in a thick mantle of fog, the result of the Gulf Stream bumping against the icy cold of the glaciers. The remark from the driver of our rubber Zodiac boat, "I smell a walrus," virtually defines high arctic sensibilities. When you can't see more than a foot or two in front of your face, other senses come to the fore. When you watch an ice bear on its floe, you see an animal blessed with excellent vision. But faced with something unknown—the noise of our small, quiet cruise ship advancing slowly through the ice—it calls on its nose, pausing every few seconds as it shuffles toward us to lift that remarkable organ in the air, and even once going so far as to raise itself on its hind legs, as if the clearer head-high air might offer a better long-range diagnostic.

To these high arctic exigencies Svalbard's plants make their adjustments. There is a world of difference between a plant like *Pedicularis* that tailors its whorled flower spike to a bee, and a poppy offering its open cup to the flies. Where the bee is strong enough to barge in, the fly has a rather more delicate set of wings. Like the bear, it finds its flower by scent, using it to sort the various brands of nectar plants offer. But what the poppy supremely offers, up there in the high wind above the cliffs, is shelter. Because the flower acts as a reflector of the sun, the temperature inside the petals is several degrees warmer than the air.

The poppy turns to the arctic summer sun so that, in the brief blossoming season, it can offer such warmth as its white flower possesses on a twenty-four-hour basis.

One starts to see why a fly might take advantage of a poppy's offerings, stepping, as we might, into a bar or a coffee house. Seeking a libation? Yes, but for the fly, or the flies—a poppy can accommodate a number of them—this bar is more like a spa or a clubhouse. The fly darts in to step out of the wind and have a drink and meet its pals. But unlike our familiar bees and hummingbirds, always in a rush as they move from one excitement to the next, the fly is quite capable of putting up its feet and taking a nap. Nor does it go very far when it leaves, a few inches maybe, to the next available shelter. On Svalbard that's how a fly proceeds.

To a flower, even in Svalbard's overcast, spectral conditions, light is important; the warmer the reflector a plant offers, the better its chance of being pollinated. And there are a number of other devices plants employ, such as hairs (around the petals, on the stems), to increase their warmth and the warmth they can offer. But the abiding exigency for flowers and flies alike is the wind that attains here a sandblast ferocity. I wondered why pulsatillas, erigerons, and arnica, plants you find in the western arctic, don't show up on Svalbard. The answer may lie with the kind of seeds they produce. The western species offer seeds with feathery bristles, parachutes intended to be dispersed in gentle breezes. On Svalbard the plants produce seeds of the small, hard, bullet-like variety, intended to go skittering for amazing distances over ice and capable of waiting, years on end, until their moment comes.

One might think that growing any of these Svalbard plants would be daunting. But given cool summer nights, a sufficiency of moisture, and adequate snow cover, a few of them might be growable. Getting them to flower in something like their arctic brilliance is another matter. We might do well to remember their predilection for growing where there are animal droppings. In my garden I've been giving manure to primulas, gentians, and daphnes in early spring. After Svalbard, I am tempted to extend the feeding to virtually any bun. They could all use the encouragement.

Photographer's Note: I used three cameras to make the images for this essay: a Leica M8, the digital rangefinder member of the M-series, with 24mm and 50mm lenses and 10.3 MP; a Leica D-Lux 4, a compact camera with 10.1 MP; and a Canon 5D Mark II, a digital SLR with an f/2.8 24-70mm zoom lens and with 21.1 MP. Images in jpg format were sharpened and in many cases cropped in Adobe Lightroom, but are otherwise unmanipulated.

While some plants on Svalbard were quickly identifiable, many of the drabas and saxifrages were not. I was unable to gather leaves for identification, both for reasons of time and because all plants are protected on the archipelago, and it did not occur to me to photograph leaves separately. I consulted the resources listed below to try to pin down species. Many thanks are also due to Bud Lehnhausen, Karen Copeland, Jane McGary and to Malcolm McGregor for helping with plant identification.

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Robin Magowan is a poet and travel writer, and Juliet Mattila is a poet and photographer. Together they have created a large and fascinating country garden near Salisbury, Connecticut, where Robin specializes in growing alpinists in troughs and rock features, and Juliet in larger perennials and a kitchen garden.

An earlier version of this article appeared in the July 2009 issue of the newsletter of the Berkshire Chapter of NARGS.

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Some Pacific Coast Lily Species

Dale Sullivan

The glory of our native lilies motivates many midsummer ventures into the mountains, when even a single flower attracts the eye like a monarch butterfly. We are uncommonly fortunate to live at the doorstep of “lily territory,” which extends from the crumpled terrain of the Siskiyou region of southern Oregon and northwestern California out to the Pacific shore. Additional species and subspecies outside our area are scattered down the Sierra Nevada to southern California, with just two species found to the north. According to Boyd Kline, my principal “lily mentor,” they all hybridize freely, and many wild plants show a range of intermediate traits where populations overlap.

Wetland Lilies

Western lilies are often separated into wet-growing and dry-growing groups. The first group centers on the leopard lily (*Lilium pardalinum*) and its many forms. The Jepson Manual recognizes some variants as subspecies, but astute local botanizers who discern differences prefer to consider them species. Their flowers may be light orange to rust-red, darker at the tip and heavily spotted with red-brown. The bulb is typically rhizome-like, sometimes producing monstrous clumps of tall stems in the type, *L. pardalinum* ssp. *pardalinum* (photo, p. 246). The most distinctive form of these wild plants has entered cultivation as “variety *giganteum*.” Perhaps a cultivar tag, ‘*Giganteum*’, is more appropriate for this group of robust clones.

One subspecies, *L. pardalinum* subsp. *shastense*, has slightly smaller flowers and is described as less likely to form large, single-clone clumps, a habit shared by subsp. *vollmeri* and subsp. *wigginsii* (photo, p. 246). These two are found in our area and prefer wet sites, often growing and blooming in flowing water. Their bulbs resist branching, and while they don’t form large single-clone clumps, their bright red-orange, spotted flowers are distinctive. In subsp. *wigginsii*, these are solid-colored rather than darker at the tips of the tepals, and Boyd tells me that lighter orange forms are indistinguishable from *L. columbianum* unless one is able to see the bulb.

Lilium pardalinum subsp. *vollmeri* very often occurs with the insectivorous plant *Darlingtonia californica*, and it tends to be fairly sun-tolerant. *Lilium pardalinum* subsp. *pitkinense* is an extremely rare southern variant from Sonoma County; notable mostly for its very restricted occurrence, it is sometimes available from cultivated stock.

From Coos County, Oregon, south, *Lilium occidentale* can be seen in coastal marshes and moist, open woods. Its red-orange flowers open to reveal a distinctive green star in the throat, and it often hybridizes with *L. columbianum*. Already a rare plant, this lily's habitat is additionally threatened by proliferating vegetation that would have been controlled by fires before humans began to suppress them, and by land clearing for new construction.

Lilium parryi, the lemon lily, occurs in wet seeps in high deserts and canyons of Arizona and southern California, and is the only true lily native to Mexico. Enthusiasts vie in growing this plant; among its many attributes are its attractive lemon-yellow color and trumpet form, abundant flowering, and strong, sweet fragrance. Other wet-growing lilies such as *L. parvum* and *L. kelleyanum* are Sierran species that are rarely grown, except by specialists.

Certainly it is the wet-growing group that holds the most promise in cultivation. Their needs are best met with well-drained sandy loam kept consistently moist and cool, in a site where the flowering stems receive high light with shade from hot sun. Like those of all lilies, the bulbs should be caged or otherwise protected where rodents threaten, and the scapes must be protected from deer and rabbits.

Dryland Lilies

Among the dry-growing group, *Lilium columbianum* (photo, p. 246) is common and widespread in mixed woods and coniferous forests from northern California to British Columbia, flowering best in openings and at the margin of woodland. Some of the finest forms are found in southern Oregon, with some heavily spotted populations on the coast. While no two plants are identical, the variety can be dizzying where *L. columbianum* crosses with neighboring *L. pardalinum* and even *L. occidentale*. Frequently occurring singly in clay-based loam, each stem holds ascending whorls of leaves and from one to more than a dozen pendant, tangerine-orange flowers with strongly recurving tepals. Bulb specialists Jim and Georgie Robinett have written that the Columbia lily needs cool conditions, resenting our hot summers. Not truly a dry grower, in cultivation it rarely succeeds outside its native range, but it can be grown in open shade in moist, rich loam, even heavy woodland clay (essentially, wherever *Trillium ovatum* is happy).

Lilium bolanderi (photo, p. 245) is a reliable find among crumbling mountain ridges throughout the Siskiyou. This bashful plant tends to hide among low shrubs, raising its nodding, brick-red flowers from the brush on stout stems. Subtle variations among plants are infinite, and in places it is known to cross with *L. rubescens* and *L. washingtonianum* subsp. *purpurascens*, with exciting results.

L. rubescens (photo, p. 245), the redwood lily, is an impressive plant in all respects, and rare in nature. With a stem rising to eight feet in ideal, shady situations, it may sport up to three dozen large, fragrant trumpet flowers, white with pink to purple shading and minute red spots on the interior. *L. washingtonianum* subsp. *purpurascens* represents the southern race of this widespread montane species. Its large, white to purple blooms are attractively spotted and extremely fragrant.

Hiking in the Coast Ranges of northern California might lead one to *Lilium kelloggii*, a lovely, scented lily with small turk's-cap flowers in all shades of rose pink, lightly spotted (photo, p. 245). Associated with yellow pine forests of the Sierras, *Lilium humboldtii* holds the most promise among dryland lilies for the garden, especially in hot climates. Its best forms are very heavily spotted, especially in subsp. *ocellatum* (formerly var. *bloomerianum*), a disjunct variant from California's southern Coast Ranges.

Cultivating Western Lilies

As one might expect, these lilies as a group are problematic in cultivation, and only a few skilled enthusiasts have raised these rascals from seed to bloom. Certainly in our valley we stand a good chance for success, but some essentials must be met. They are in fact far from "dry" growers, and in habitat their bulbs often sink to great depth, though in some cases they remain very near the surface, resting wherever there is a consistent source of moisture. In cultivation, success has been had with a rich clay-loam base, appropriately amended to aid drainage, on which young bulbs, raised from seed or bulb scales, are set and covered with a sharply drained mix of grit and pumice. Watered from autumn to early spring, they should be shaded when young and allowed more light as they mature, always with a cooling mulch of pine needles or light-colored gravel. As warmer weather induces dormancy, withhold water until the gritty topping dries down to the bulb, which remains cool and well-fed on its rich base. Deep terracotta pots plunged in a sand bed are useful for housing and protecting these bulbs.

Sources and Hybrids

The western lilies have made only brief commercial appearances, and while many hybrid strains have been introduced, these are now difficult to find. Notoriously susceptible to virus, they are perhaps best perpetuated as pass-along heirloom plants, especially the most vigorous clones of *L. pardalinum* subsp. *pardalinum*. Lily hybridizers, both amateur and professional, continue to be drawn to the variety of form, richness of color and spotting, and strong, towering stems. With careful selection of parent clones, Western lilies offer an enormous gene pool from which to select parent material with appropriate traits that go beyond flower color, such as vigor and potential for virus resistance.

Through the North American Lily Society, and recently the internet, specialists have released seed from intensive breeding work, selectively backcrossing with vigorous strains of the *L. pardalinum* group and numerous others. *Lilium humboldtii* subsp. *ocellatum* figures largely in contemporary strains and contributes dramatic spotting. The lemon lily is an obvious choice for breeding, and is certainly a prominent parent in new generations. The western lilies are not likely to experience the worldwide commercial success of other lily groups such as the indefatigable Asiatics or the astonishing Orienpets, yet I believe they have enormous potential for future gardeners, especially those who enjoy a challenge.

Lily seeds are generally easy to germinate, and although many of our species can be difficult or impossible to rear to perfection, hybrids might bloom in two or three seasons from seed. Seed from common wild lilies can be harvested sustainably, and vigorous clones should certainly be shared with gardening friends and distributed through specialist societies to encourage local distribution and a stronger base of interest in the plants themselves.

Further Reading

McRae, Edward. 1998. *Lilies: A Guide for Growers and Collectors*. Portland: Timber Press.

McRae, Edward. 2001. "The Genus *Lilium*." In *Bulbs of North America*, pp. 177–192.

Portland: Timber Press and NARGS.

Dale Sullivan owns and operates Siskiyou Rare Plant Nursery in Talent, Oregon.

Corrections

- The tribute to Larry Thomas and his terrace garden that appeared in the Summer 2009 issue was attributed to Steve Whitesell, but was actually assembled from four separate pieces written by Lola Lloyd Horwitz, Michael Riley, Abbie Zabar, and Steve Whitesell.
- In vol. 67, no. 3, the following errors occurred in the photo section:
- The images on p. 175 were inadvertently reversed and appear upside-down.
- The photo of *Shortia* 'Leona' on p. 184 was taken by Maria Galletti, not by Harry Jans.
- The photo at the top of p. 170 was taken by Lyn Lang, not by author Amanda Haney.

Botanical Travels with Rock Garden Pioneers, Part 2

Compiled by the Editor

Continuing our retrospective series celebrating the 75th anniversary of the North American Rock Garden Society, in the previous issue (summer 2009) we presented a selection of excerpts and summaries from an important genre of articles that have appeared in the *ARGS Bulletin/Rock Garden Quarterly* since its inception: accounts of visits to natural areas where interesting and important plant communities can be seen. Part 1 featured excerpts from articles about the American West. Part 2 travels gradually eastward and then crosses the seas.

You can obtain the full text of any article mentioned or excerpted in this issue from the NARGS Book Service, which will either sell you the entire back issue at a nominal price, or, if no extra back issues are held, will photocopy the article for you. To look up specific places, refer to the Subject section of the Cumulative Index, which is available on CD from the Editor and will eventually be posted on the NARGS website.

Plains and Prairies

☛ The history of gardeners' interest in the plants of America's Great Plains is closely tied to Claude Barr, a nurseryman of the region who selected, grew, sold, and wrote about them. His articles over many years stimulated interest in such genera as *Astragalus* and *Eriogonum*, before then little known to gardeners who had been depending on British writers for advice on rock garden planting. "Through the **Nebraska Sandhills**" (2:105-108) recounts a journey to see "fern meadows where small species predominate over the grasses; loose sands where *Lathyrus ornatus* maintains sway and enflames the May landscape with rose purple and pink; hummock formations in moist meadows with *Lilium umbellatum* stealing the July scene; and the peculiar company of the environs of the 'blow-outs' including rare *Penstemon haydenii*." He drove on a "fine black-top road from the south-east through Broken Bow to the valley of the Middle Loup and up to Thedford, then west to Seneca, making his way north on the basis of confusing directions from "the filling station Greek": "Yet somehow I was assured, and I

cared little by now whether he was too sanguine.” Over rutted roads, urged on by kindly ranch wives with German accents, Barr made his way into the sandhills. Eventually, “How wonderful to know *Penstemon haydenii* in its native fastnesses . . . it is not difficult to grow in approximations of its habitat, easy access to infrequent moisture at the roots, bottomless drainage, coolness equivalent to easterly or northerly slopes, and a lean rooting medium.” He finally reached Valentine, the market town for my mother’s German ranching family in the old days, whence “next day, some ninety miles of sand were traversed, westwardly.” “I left the Sandhills with the conviction that an entire season might not reveal all their well-guarded beauty.”

“In the **Killdeer Mountains**” (20:80–81) of North Dakota, Barr searched for and found a reported colony of what he then called *Clematis pseudoalpina*, now placed in *C. columbiana*, as well as many other species of rocky outcrops on the Plains.

Eastern Canada

☛ The first appearance of Canada comes in 1949, with Edith C. Lawton’s “A Botanical Trip to the Gaspé Peninsula” (7:54–55). Quebec’s **Gaspé Peninsula** is the site of the Shickshock Mountains, a range with two peaks around 4000 feet high. It is “celebrated for its special arctic alpine flora, of which many species are endemic.” The endemics in fact are not so numerous, but this is one of the closest places for inhabitants of the U.S. Northeast and eastern Canada to see such species as *Diapensia lapponica*, *Loiseleuria procumbens*, or *Rhododendron lapponicum*. Lawton’s party started from Ste. Anne-des-Monts on the north side of the peninsula and drove to Mont Albert, one of the two peaks, which they ascended and descended in a day, catching sight of caribou as well as alpine plants. Lawton recommends some other sites on the Gaspé: “Le Bic has jagged headlands reaching out into the St. Lawrence” with saxifrages along the cliffs; “the region around Perce has a flora of great interest”; “Bonaventure Island and its famous bird sanctuary” are as interesting to plantspeople as to birders, with the best plants in “little open glades in the woods”; the Bonaventure River has brilliant flowers on “little gravelly islands.”

Northeastern United States

☛ NARGS has always had a concentration of members in New England, so the hills and peaks of that region received much attention. Mary Gray in “Some Mountain Trails in New Hampshire” (24:97–98) claimed that “**Mt. Washington** has the worst weather in the world,” but was one of many writers who described its flowers. She focused on “the Monroe Flats, where the most interesting plants grow,” the Oakes Gulf Trail, and the Alpine Garden Trail on the east side of the mountain. She found a double-flowered form of *Diapensia lapponica* “on the old



Coastal tundra and mountains, Hornsund, Spitsbergen (p. 227). (Photos, Juliet Mattila)

Silene acaulis around a whale vertebra, Bjørnøya, Svalbard (p. 229).





Rhodiola arctica (syn. *R. integrifolia*, *R. rosea*) on Bjørnøya, Svalbard (p. 229). (Photos, Juliet Mattila)
Left, *Saxifraga flagellaris* on the Svalbard archipelago. Right, a *Draba alpina* on Bjørnøya.





Plant community with *Papaver dahlianum* on Bjørnøya, Svalbard (p. 229). (Photos, Juliet Mattila)

Saxifraga aizoides at Nordfjord, Norway.





Saxifraga cernua rises through a fallen feather, and *S. cespitosa* peeps out from under a rock on Bjørnøya (p. 228). (Photos, Juliet Mattila)

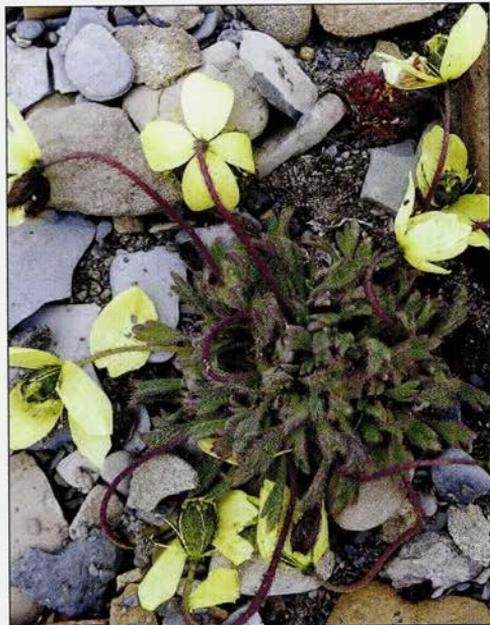
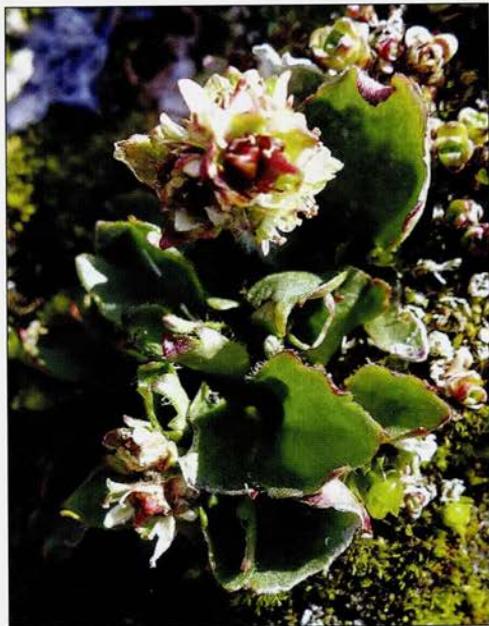
Oxyria digyna and *Micranthes stellaris* at Briksdal, Nordfjord, Norway.





Variation in *Saxifraga cespitosa* on the Svalbard Islands (p. 228).
(Photos, Juliet Mattila)





Left, *Micranthes nivalis*, Hornsund, Spitsbergen.
Right, *Papaver lapponicum*, Bjørnøya. (Photos, Juliet Mattila)

A large old plant of *Daphne* 'Lawrence Crocker' (p. 261; photo, Kathy Pyle).





Lilium rubescens in the Coast Range, northern California (p. 235). (Photo, Jane McGary)

Left, *Lilium bolanderi* in the Siskiyou Mountains (p. 234; photo, Curt Kline).

Right, *Lilium kelloggii* in cultivation (p. 235; J. McGary).





Lilium columbianum, a widespread western American species (p. 234). (Photo, Curt Kline)

Left, *Lilium pardalinum* subsp. *pardalinum* (p. 233; Curt Kline).
Right, *Lilium pardalinum* subsp. *wigginsii* (p. 233; Kathy Pyle).





Aquilegia rockii with the swallowtail *Papilio xuthus*, both native to Gansu province of China; plate by Cindy Nelson-Nold (p. 256) for the book *Columbines* by Bob Nold.



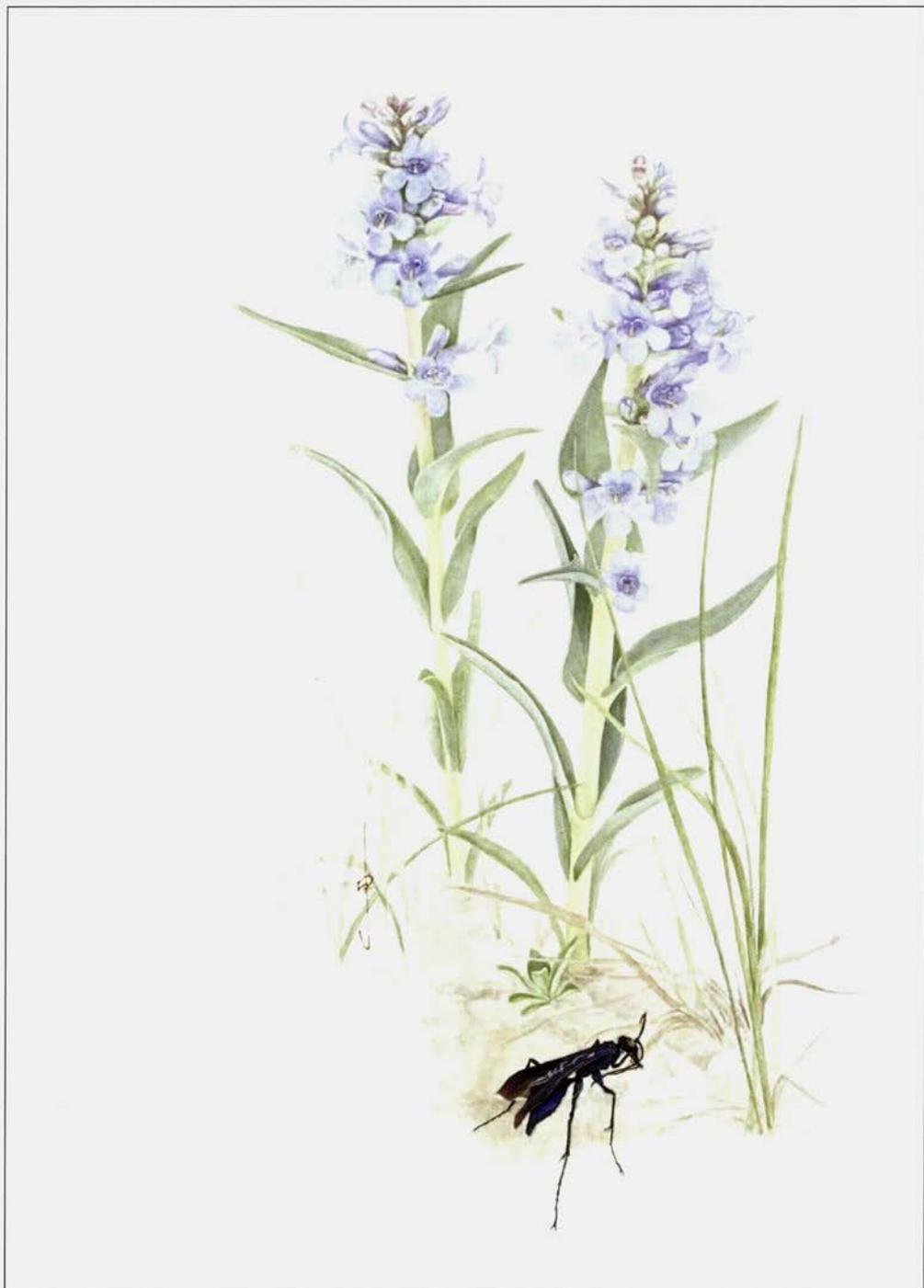
Aquilegia viridiflora var. *atropurpurea*, plate by Cindy Nelson-Nold
for the book *Columbines* by Bob Nold.



Aquilegia jonesii, one of a series of four cover paintings by Cindy Nelson-Nold for the 2005 volume of the *Rock Garden Quarterly*.

Echinocereus triglochidiatus var. *neomexicanus*, painting by Cindy Nelson-Nold.





Penstemon angustifolius var. *caudatus* with *Pepsis* wasp, plate by Cindy Nelson-Nold for the book *High and Dry* by Bob Nold.

Crawford Path, halfway between the crosses which mark the places where two men had died.” “Then, as there could be nothing more beautiful so see after that, I picked up my pack and went down the mountain.”

☛ Grace Babb of Maine contributed frequently to the *Bulletin*, including “Collecting Trip to Smugglers Notch, Vt.” (10:87–88), an excursion on which 19 enthusiasts repaired to “the foot of the cliffs on **Mt. Mansfield**,” “collecting such treasures as were accessible and seemed most likely to grow in our lowland gardens.” Babb’s “Alpines on **Mt. Pisgah**, Vermont” (12:27–28) recounts a group excursion to this peak on Lake Willoughby (there are other Mt. Pisgahs in North America), a trip that included a stay in tourist cabins, a picnic, and a plant exchange. The local alpine plants were not immune from being “exchanged,” but at least they were hard to reach.

☛ The *magnum opus* on New England was James E. Mitchell’s “On Eastern Cliffs,” excerpted and condensed from a never-published book manuscript (17:41–56, 18:24–25, 116–118, 20:82–85; reprinted, further condensed, in *Rock Garden Plants of North America*). A detailed trail guide with botanical notes, it describes “the celebrated **Long Trail** . . . beginning at Williamstown, Mass., and extending over the highest peaks of the **Green Mountains** to the Canadian line in the town of North Troy, Vt.” Rock gardeners are directed to its high points, Mt. Mansfield, Camel’s Hump, and Smuggler’s Notch. In the **White Mountains** of New Hampshire and Maine, he singles out Mt. Washington, the Alpine Garden, Tuckerman Ravine, and King Ravine, recommending the Six Husbands Trail. In the Shickshock Mountains of the Gaspé Peninsula he describes Mt. Albert. Individual trails on Maine’s **Mt. Katahdin** are described.

Central Atlantic and Southeastern United States

☛ One of the most unusual plant communities on the U.S. Atlantic coast is in the **New Jersey Pine Barrens**. Among the authors leading readers into this region was G. G. Nearing, whose “Unsolved Mysteries of the Pine Barrens” (11:7–13; repr. in *Rock Garden Plants of North America*) focuses on individual species and their potential cultivation. It is complemented by Rick Darke’s “The New Jersey Pine Barrens” (47:21–26; also repr. in *RGPNA*).

Great Lakes

☛ The Great Lakes seems an unlikely region to find anything we could call “alpine,” but it hosts many ornamental species, including such boreal specialties as *Primula mistassinica* and *Saxifraga tricuspidata*. Iza Goroff and Deon Prell’s “Fourth of July on **Isle Royale**” (33:53–57) reports a chapter trip to a 40-mile-long island in Lake Superior to study its various plant communities: open forest,

mossy hummocks studded with *Moneses*, deep forest, bog, and rock outcrop. "Isle Royale is known for its orchids, over 40 species and varieties." Some of the rarest plants were seen during a guided side trip to Raspberry Island, just off the town of Rock Harbor.

Beyond North America

☛ By the mid-1950s American gardeners were beginning to renew their acquaintance with the plants and gardens of **Japan**. An especially fruitful connection was made by Harold Epstein of the ARGS and a group of Japanese botanists and horticulturists he met through the Society. As told in "A Visit to Japan" (13:31–34, 86–88, 115–117), he spent most of his time in gardens and nurseries. He found people creating "tray gardens": "Here we saw for the first time some new forms of Japanese plants that apparently had only recently been discovered. They are distinct diminutive varieties of familiar alpine species that emanate from Yakushima, a small island south of Kyushu, in a latitude which may be described as semi-tropical." Today the epithet *yakushimanum* is shorthand for a dwarf or compact plant. Epstein did manage to see Japanese alpine in habitat during an excursion to Mt. Norikura, northeast of Nagoya in the Japan Alps, where "collecting [*Dicentra peregrina*] and many other natives was now prohibited." Epstein on this trip seems to have focused on rhododendrons, but he later was noted for his work with *Epimedium*.

☛ Ralph R. Stewart of Gordon College, Rawalpindi, India, urged people to botanize on horseback in "Alpine Flowers of **Kashmir**" (1:20–24, 1943): "I would go out collecting on almost every fine day. . . . My list now numbers some 2,200 species for the whole of Kashmir." Today's political situation probably bars us from following his footsteps in Baltistan, "Little Tibet" (now controlled by Pakistan), over the Thalle La to Rupshu, where he camped at 15,000 feet. "Only the hardiest plants can stand such conditions but I have collected well over a hundred that are doing it." He discusses primulas, gentians, and composites, and "gravel slides near the upper limit of plant growth," where he found *Corydalis crassifolia*, *Crepis glomerata*, *Lagotis globosa*, and *Nepeta longibracteata*.

Oleg Polunin, then living in England, contributed his account of the same area ("Plant Hunting in Kashmir," 15:97–102, 16:39–44, 74–79) and his long expedition, which led to his still useful book *Flowers of the Himalaya* (coauthored with Adam Stainton; Oxford University Press, 1984). Polunin traveled mostly on horseback and returned with a vast collection of herbarium specimens and photographs.

☛ The first appearance in the journal of a European wildflower walk in the **Alps** was "Paradise of Alpine Flowers" by E. Hauser of St. Moritz (8:40–42), who wrote: "The peerless beauty of the landscape of the upper **Engadine** is famous, and its center, St. Moritz . . . is an ideal starting point for botanical excursions.

Some of the friends of alpine flowers erroneously believe that all the rare plants have been exterminated by hordes of tourists pouring through the Engadine every summer . . . happily, this is not the case.” His article describes the different habitats—snowmelt meadows, woodland clearings, cliff faces, brushy slopes above tree line, and the “glacial zone,” site of *Eritrichium nanum*, “the heart’s desire of every rock gardener.” The flower assembly of the mountains’ different short seasons are described, and the article concludes with a note that Herr Hauser has propagated “in numbers many of the inhabitants of the glacial zone which are believed to be impossible or very difficult to propagate,” an early instance in our journal of the satisfaction of the rock gardener who lives high in the mountains.

☛ As people began to visit the Mediterranean again in the postwar period, we saw such reports as Helen M. Fox’s “Spring Flowers Seen in Israel and Greece” (11:108–115): “Somehow in regard to **Israel** one reads and hears much about human accomplishments, and little space has been given to the beauties of the countryside. . . . Upper Galilee, with its lush green hills, its flourishing olive orchards, and the sound of rills and brooks in the meadows north of Lake Huleh, with the whole scene dominated by snow-capped Mt. Hermon, is particularly appealing.” “I spent a week at Tiberias on the shores of Kinnereth and went for walks every day into the country searching for flowers. A month could be spent and new flowers found continually.” Today the flora of Israel is well documented, though the land is drastically changed.

☛ Sheila Maule (“Holiday in **Sardinia**,” 32:101–106) and her party traveled from Scotland to their island destination by road and car ferry, not by tourist flight as they might today, and despite “a difficult drive over the Mt. Cenis Pass,” they enjoyed spring flowers in the lowlands along the way. They explored the territory around their borrowed beach house, and “a trip to the northern tip of the island to St. Teresa and Capo Testa was very interesting.” They made a round trip to the Nuoro Plateau, a highland, seeing *Pancreatium illyricum* and *Narcissus cupularis*, among many other bulbous species. A drive up Monte Linbara (4000 feet) was exciting for “a most lovely *Viola*”, romuleas and crocuses. They completed their vacation with a day trip to Corsica and a short stay in Venasque in Provence, whence they visited Mont Ventoux and *Vitaliana primuliflora*.

☛ The 1956 volume included a two-part account by C. R. Worth of his participation in a 1938 botanical expedition to **Chile**. Reading it today makes me appreciate how much easier we have it now, with paved roads, rented SUVs, gas station-convenience stores with ATMs in them spitting out pesos, and a sackful of helpful plant books. Worth and his friends, for instance, had no John Watson to warn them off the genus *Loasa*: “John and I approached them barehanded, and found the leaves covered with stinging hairs which raised pustules all over our hands, causing much discomfort for a week.” This encounter took place near the botanical hot spot of Taltal, and the half-recognized and “nondescript”

(in natural-history terminology, officially “undescribed”) plants he saw can often be identified today from his notes.

More useful to the present-day visitor is “Plant Hunting at 13,000 to 15,000 Feet (4000 m to 5000 m): The **Atacama Desert** in Chile” (32:49–53), by Otto Zöllner of the Universidad Católica de Valparaíso, a botanist who is commemorated in a number of plant names from the region. He drove 525 km from Copiapó, Chile, to Tinogasta, Argentina, a remarkably desolate route even for that part of the world: “After two hours in our motor truck we arrived at San Andrés, a little oasis between the mountain ridges . . . inhabited by an old goat shepherd.” They ascended a 4000-meter pass and drove down to the flamingo-haunted salt Lake Maricunga, exploring the slopes. To combat altitude sickness, they drank tea made from the leaves of *Senecio eriophyton*, a local remedy. Pushing on to Laguna Verde, they set up camp by a hot spring to conduct ecological research. Zöllner describes the cushion plants of this extreme environment: “The most beautiful of them all was *Calandrinia oculata* with great bluish flowers.”

☞ If there is one area visited by botanical travelers that impresses audiences more than any other, it must be the **Himalaya**. The severities of elevation, political barriers, and long treks limit botanizing here to the fittest and most devoted of us. The earliest account in the *Bulletin*, however, is by George Pride (“Two Sides of Everest,” 28:81–86), who seems to have done most of his traveling by jeep.

☞ New Zealanders contributed strongly to early volumes. Informed by their articles, Reuben and Harriette Hatch of Washington visited and then wrote “Some Alpine Plant Sites, South Island, **New Zealand**” (32:133–137). The sites include Mt. Altmarlock in the Black Birch Range, for which “the key to the road gate . . . may be obtained through the Department of Public Works, Blenheim,” not an unusual procedure for New Zealand, though I myself found that the holder of the key may likely be off on a trip himself. Alluring descriptions in natural history books led the Hatches to Gertrude Cirque in Fiordland National Park, where a steep trail (another common NZ feature) brought them through “numerous species of *Celmisia*, many only inches high” and eventually to “a spectacular and dizzying view of Milford Sound.” An easier ascent was to Key Summit “on the main divide of the Alps above the lush Hollyford and Eglinton valleys,” offering lush forest, steep slopes, and an alpine sphagnum bog. A rough drive in the Old Man Range north of Roxburgh led to special plants of the dry screes: “We returned thinking we had seen most everything but learned later we should have gone a bit further. Sounds familiar, doesn’t it?” Finally they recommend a visit to the ski area at Mt. Hutt, from which easy walks reach the Vegetable Sheep (*Raoulia mammillaris*, *R. eximia*) that are emblematic of New Zealand to rock gardeners. (A local plantsman warned me that Americans would find the road too frightening; he must have driven it with Americans from a different part of our country.)

☞ One of my favorite editorial accomplishments was recruiting David Hale to write his series “The Botanical Traveler” on some of the many explorations he

and his wife, Donna, have made over the years. The articles include helpful tips on making one's way in remote areas and mention of cultural sites, as well as descriptions and photos of rare and lovely plants. He began by "Starting Out in Europe—On Your Own" (59:281–285), moved to his specialty of South America with "Southeastern **Peru** and Adjacent **Bolivia**" (59:90–92) and continued with the useful and detailed "The **Chilean and Argentinian Andes**" (61:89–95 and 166–171).

☛ I have mixed feelings about publishing accounts of group tours, but I've written such articles myself when copy was desperately needed, and a good report of the plants seen can attract readers to visit the sites on a subsequent tour or on their own. "A Trek in **Nepal**" by Audrey Williams (47:230–234) gives readers the feel of the adventure and evidences a fine appreciation of the plants seen and their garden potential.

☛ Rare is the rock garden today that has not benefited from the seed collecting of the Czech botanist and mountaineer Josef Halda. His long association with our journal began in the mid-1970s with "In the **Caucasus** Mountains" (33:3, 78–85, 128), illustrated with delightful line drawings by his wife, Jarmila Haldova, who accompanied him on many years of arduous treks.

☛ Gladys Daniels visited the state of Swat in western **Pakistan**, calling it "A Botanist's Paradise" (21:13–15): "Not so many years ago Swat was a fierce tribal area." Not so many years later, either. Will our knees last until a time when we might follow in her footsteps? Panayoti Kelaidis and Don Howse were botanizing there in the second week of September 2001, on an itinerary that was hastily rearranged.

Remembrance: Cindy Nelson-Nold

Panayoti Kelaidis

I have heard it said that we *think* we are our corporeal selves, flesh and blood and substance. But in fact, who we *really* are is our myriad reflections in the hearts and eyes of those we know. Without a community, the body may exist in its physical inertness, but what constitutes our lives is the warp and weft of our conversations, our interactions, our passions and our day-to-day interplay with other people. It could be that perhaps we are immortal, since even when our physical body perishes, our interactions continue to reverberate forever, really. “We” are the stone, but the waves we splash circle out forever into the cosmos. Our image and words live on in the hearts and minds of those we love long after body is buried or burned. Intellectually, philosophy seeks to assuage. I only wish it could or would.

Cindy Nelson-Nold passed away unexpectedly in late May. She had visited my garden the day before and we had hugged and exchanged brief words; Cindy was always warm, affectionate and attentive with her many friends. I would have liked to have chatted more, but there were other guests, I was distracted. We had our whole lives ahead of us, after all. She wasn’t feeling too well, I heard, but I did notice her here and there in the garden. Little did either of us suspect that this would be the last time we would have to reflect in each other’s lives.

We mourn others for many reasons. Cindy’s quiet presence loomed large for many of us because she was so passionate about so many things we shared: plants, of course, and gardens. But really the whole natural world: insects and animals, weather and land forms—not to mention the whole world of art and culture, music and politics and everything she cared so deeply about and would talk of with that musical Minnesotan twang, and her wonderful way of summing things up with a sort of quiet punch and that smile that lingered so. She loved people, animals, plants, art, music and much more so deeply and with an artist’s almost tangible passion that glowed with energy around her like an aura.

Her friends will yearn for that glow, but we are also selfishly despondent that we will not have more of her amazing watercolors that literally took your breath away. She was far and away my favorite watercolorist ever. I never dreamed that the robin’s-egg blue of *Penstemon angustifolius* could be captured on paper—and

not just the blue, but the shimmery quality it has on the prairie, the glint of light and almost the shiver of the wind. The insects she painted seem ready to flash and wing away, and the three-dimensionality of these paintings captures the very ambience of the natural world and a precise moment in it. How fortunate we have been to have seen so many of these works over the years and to treasure them in the three classic books Bob and Cindy produced together.

And there is Cindy's remarkable partnership with her husband. The tenderness and joy they shared was manifest, and beyond admirable. We all give our condolences to Bob.

I aver that in a community of gardeners, rock gardeners especially, the impact made by a strong-willed, artistic presence like Cindy's is indelible and eternal and profound. The impressions she made on so many of us are vibrant and vital: she lives on richly in our lives and in our hearts, and the transcendent beauty of her art will be admired and loved by everyone who is blessed to have one of her paintings, or even a magazine or book she illustrated. The real immortality of art has to be some solace, I would hope, to her friends, family, and loving husband.

Cindy Nelson-Nold painted three annual series of covers for the *Rock Garden Quarterly*, which appeared in 1994–1995 (volumes 52–53) and 2002 (volume 60). Some of her paintings, chosen by Bob Nold, are reproduced in this issue on pp. 248–250. Bob wrote and Cindy illustrated the books *Penstemons*, *Columbines*, and the new *High and Dry*, all published by Timber Press. The “Remembrance” above first appeared in the newsletter of the Rocky Mountain Chapter, July–August 2009.

In Memoriam: Dr. Thad Howard, Bulb Collector

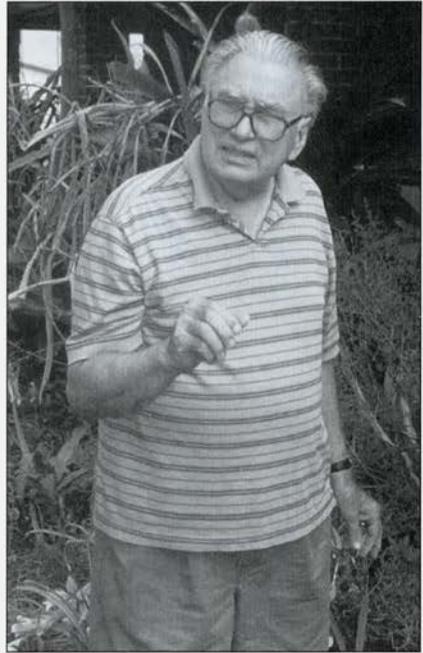
Bobby J. Ward

“We left the Pan American Highway and went west to Xilitla on Mexico 120. West of Xilitla, I was able to re-collect *Zephyranthes macrosiphon*, finding a few in bloom. These have large rose-pink flowers and look like slightly smaller versions of *Z. grandiflora*, with longer tubes and shorter pistil. It would be nearly a week later before we would collect any *Zephyranthes* again. Most of these are bloomed out by July.”

Thus begins one of Thad Howard's numerous travel logs that reported on bulb-collecting trips in Latin America. His Xilitla adventure took place in the summer of 1982 and was published in *Plant Life*, the bulletin of the American Plant Life Society, later to become *Herbertia* and the International Bulb Society, respectively. Howard, who died on April 21, 2009, at age 79, was

the foremost authority on geophytes of the southern United States and much of Latin America, based on five decades of traveling, collecting, cultivating, and writing about them.

Thad Howard was born in San Antonio, Texas, in 1929. His interest in plants started as a child when he found discarded cannas and irises in a vacant lot. In time, a copy of *Garden Bulbs in Color* by Horace McFarland became his bible, further stimulating his interest in bulbous plants, long before the word “geophyte” crept into usage. By age 16, he already could identify local native *Habranthus*, *Zephyranthes*, *Allium*, *Nothoscordum*, *Cooperia*, and *Nemastylis*. Howard joined the



Brackenridge High School Garden Club, and finding that its dreary name had no teenage appeal, suggested, on a whim, changing the name to the Campus Dirt Dobbers. The new name galvanized interest and membership soared. To raise money, the CDDs hosted dances honoring the school's basketball and football teams. These dances gave social acceptance to the CDDs, who used profits to fund campus beautification projects, including beds of daffodils.

Howard attended North Texas Agricultural College (Arlington) and the School of Veterinary Medicine at Texas A&M (College Station), graduating with a doctorate in Veterinary Medicine in June 1953. With a month to spare before becoming a lieutenant in the Veterinary Corps of the U.S. Army, he made a quick trip to Mexico, where he collected previously undescribed species of *Zephyranthes*. He wrote the story of that trip in 1954, the first of his many articles for *Herbertia*. After finishing his army duties, he went again to Mexico and discovered a large-flowering *Zephyranthes*. It would be named *Z. howardii*, the first of several specific epithets honoring him. In 1958 he opened the San Pedro Animal Hospital in San Antonio, retiring from practice in 1999. He lived in St. Hedwig, outside San Antonio.

Shortly after beginning his veterinary practice, Thad Howard opened Zephyr Gardens, a mail-order and on-site retail nursery that specialized in bulbous plants, in particular *Zephyranthes*, *Hymenocallis*, *Crinum*, and *Sprekelia*. He issued an annual catalog, often illustrated with his own line drawings. He closed the nursery in 1972. But he continued to travel, looking for bulbs, in Texas, Mexico, Guatemala, Brazil, and Argentina. These treks resulted in the discovery of at least 35 new species. Some were named by him and some others named by botanists in his honor, including *Polianthes howardii*, *Habranthus howardii*, *Allium howardii*, *Hymenocallis howardii*, and *Sprekelia howardii*, the last a dwarf species Howard collected in 1962 in Puebla and Oaxaca, Mexico. Most of the discoveries were published in *Herbertia*, which documented his bulb interest, including recently three new species of Mexican *Milla*. The IBS honored Howard in 1970 with the Herbert Medal, its highest award, for his contributions to advancing the knowledge of bulbous plants.

In 2001, the University of Texas Press published Howard's *Bulbs for Warm Climates*, a guide to bulb growing throughout USDA zones 8 and 9, concentrating heavily on the growing conditions that Howard knew best: the alkaline soils, irregular rainfall, and baking temperatures of central and southern Texas, an area that receives some frost each year. Many of the plants easily grow in USDA zone 7 in the Upper South and beyond. The book is an alphabetical list by plant family from Agavaceae (agaves and yuccas) to Zingiberaceae (*Hedychium* and other gingers). Unfortunately, missing from it are the stories, anecdotes, and reminiscences Howard shared at after-dinner IBS gatherings for years. These would have added immense reading pleasure. Howard was most knowledgeable about the rain lilies—*Zephyranthes* and *Habranthus*, not true lilies but amaryllids—and there is much valuable information in his book about them. However, the depth and breath of his knowledge of this group of plants is not fully demonstrated, nor is there sufficient detail of his extensive hybridization work, which

resulted in horticultural forms that are currently widely grown—perhaps the result of an uninformed editor or a press trying to reduce publication costs.

I first met Thad Howard at the annual meeting of the International Bulb Society in May 2000 in Lake Charles, Louisiana. It was a small gathering of bulb aficionados for a weekend of talks, reminiscences, and plant swapping. The most anticipated lecture of the weekend was by Howard, who surveyed his decades of travels to Central America studying rain lilies. It was a rare opportunity to see images of so many plants, some in the wild and others in gardens. At the end of the organized program, NARGS member John Fellers, a rain lily enthusiast from Auburn, Alabama, gave an impromptu presentation of about 150 slides of rain lilies that Thad had omitted or forgotten altogether that he had ever grown. Fellers had kept detailed records of his own rain lily breeding program and was keen on Howard's collections. Between the two of them, there was an extraordinary opportunity to witness nearly 100 combined years of plant-hunting history. Better still was their convivial repartee. It is a pity that no recording exists. In the audience was Jack Elliott, a bulb expert from the UK, who sat in amazement listening to the virtuoso performances of these authorities.

For a number of years I corresponded with Howard, who enjoyed sharing observations as well as seeds and bulbs. In a letter to me (May 13, 2001), Thad wrote: "This morning I found *Zephyranthes dichromantha* in flower. It is several months ahead of schedule, but who cares? It will give you a head start and perhaps you might get it to bloom in a year or so. I'll send you seed as soon as it ripens, and can send more later, too. If you don't have *Z. clintiae*, I can send this to you, too. Because of its wine-red color, it is one of my favorites. I grow my rain lilies in the ground. . . . I also have *Z. lindleyana* in bloom now from my Mexican trip. It is remarkable in its being a dark rose rather than pink and it is setting a husky seed pod. They rarely make offsets, so must be propagated from seed. But it is hardier than most, so can be grown out of doors the year round. Do you want seed? They bloom very early, along with *Z. atamasca* and so open the rain lily season each year. Mature bulbs will throw off-season flowers until fall."

Thad Howard's death follows by twelve years the passing of Lynn Lowrey and Benny Simpson, two other giants of contemporary Texas horticulture and botany. John Fellers, mentioned above, died on July 8, 2009, at age 87. He amassed a huge collection of rain lilies at his Alabama home, but none of his hybrids has been released commercially.

Bobby J. Ward is a past president of NARGS and currently its executive secretary. His latest book, a biography of horticulturist J. C. Raulston, will be published later this year. Contact him at: <biblio@nc.rr.com>.

The Story of *Daphne* × *medfordensis* ‘Lawrence Crocker’

Baldassare Mineo

On a hot summer day in 1992, Jerry Cobb Colley and I visited Lawrence Crocker (December 8, 1905–June 28, 2002) at his beautiful home and garden in southern Oregon’s Rogue Valley. Lawrence and his former business partner, Boyd Kline, had sold the Siskiyou Rare Plant Nursery 14 years earlier to Jerry and me. We often stopped by Boyd’s or Lawrence’s to stroll through their gardens and acquire more plant wisdom from our dear mentors. As usual, on that day Lawrence had a number of plants propagated to give us, and he directed us to several plants in his garden, where he helped us gather seeds and cuttings. Since Lawrence was a great lover of native bulbs, and it was summertime, we probably also dug some dormant fritillarias and erythroniums.

That summer visit was typical of many times we stopped by Lawrence’s—except for an incident that occurred just before we hopped in our truck and headed home. I sighted something special in Lawrence’s rock garden beside the driveway; I probably yelped with excitement and then urged Lawrence and Jerry to look at a couple of daphne seedlings that had caught my attention.

It wasn’t unusual to find a *Daphne* species self-sowing in Lawrence’s magically prolific garden. Lawrence had a very green thumb, and over many years he had improved his soil into a rich loam. All three of us stood over these two identical and strong little seedlings, barely 2 inches tall, starting to branch out with rich green leaves. Jerry and I agreed they had to be hybrids; Lawrence was skeptical. The two mature daphne parent plants grew nearby on either side of the seedlings. One parent was a billowy shrublet of *Daphne sericea* ‘Collina’, and the other a small spreading specimen of *Daphne arbuscula*. The seedlings’ foliage was entirely different from any species or cultivar in Lawrence’s large daphne collection. I recall Lawrence remarked something like, “Yeah, I’ve been keeping my eye on those seedlings because they seemed to look unusual to me too, but they are probably nothing special.” Lawrence’s habit of downplaying his wonderful gardening skills and impressively productive garden didn’t dampen Jerry’s and my enthusiasm for this discovery. We had a good feeling these seedlings would turn out to be very special. Lawrence chuckled at our excitement: he had seen daphne seedlings before; they sprouted here and there in his garden, even

though daphnes rarely self-sow much in other gardens. Lawrence assured us we could come back and take a few cuttings. Maybe there would be enough growth by next summer. We would see.

The rest is the history of a very fine plant that Jerry and I propagated and finally listed in the Siskiyou Rare Plant Nursery catalog in 1995. We named it *Daphne* 'Lawrence Crocker' (photo, p. 244). Later the astute botanist and author Josef J. Halda wrote *The Genus Daphne* (privately printed, 2001), and he assigned the specific name *×medfordensis* to this cross. We originally described it in our 1995 catalog thus: "From the garden of Lawrence Crocker, our mentor and one of the founders of S.R.P.N. A glorious new hybrid of *D. arbuscula* and *D. collina*, which appears to be an enlarged version of *D. arbuscula*. Long, thick textured leaves and rich pink flowers." Later we added a description referring to how the richly fragrant flowers cover the plant twice a year, first in April to May and again in July.

The fame of the beautiful *Daphne* 'Lawrence Crocker' has spread around the world, as daphne lovers everywhere sought out and planted this special cultivar in their gardens. There are other named cultivars of this same cross in the trade, including 'Cheriton' and 'Tichborne', but the superior growth habit and abundant, extended flowering of 'Lawrence Crocker' will always make it a favorite, especially here in the Rogue Valley.

Baldassare Mineo co-owned Siskiyou Rare Plant Nursery with Jerry Colley from 1978 until 2005. He still gardens on the nursery property at Casa d'Italia, his home in Medford, Oregon. He is the author of *Rock Garden Plants: A Color Encyclopedia* (Portland: Timber Press, 1999).

Tips and Techniques: 75 Years of Rock Gardening Craft

Compiled by the Editor

In the winter 2009 issue we looked at what contributors to this journal through the years had said about planning and building rock gardens. The excerpts below from back issues deal with practical details: propagation, pest and weed management, and specialized kinds of cultivation. Some of them may be outdated because of later technological developments, but some may be little-remembered practices that will be welcome to today's rock gardeners, especially those who concentrate on "organic" methods and recycling rather than buying new materials. As before, ellipses are not indicated, and typography and spelling have been updated silently.

☛ The tunnels which moles have opened furnish an ideal habitation for various sorts of mice, and it is these that do the damage to our prized plants. In the Middle Atlantic states one of the worst offenders is the pine mouse (*Pitymys pinetorum*). [Mary G.] Henry reports complete success in protecting not only lily bulbs, but also clintonias, gentians, dwarf iris, and various other plants [with] $\frac{3}{4}$ -inch crushed stone. The stone is mixed thoroughly and evenly with an equal volume of soil, and the plant's roots are wholly surrounded with the mixture. "The sharp edges of the freshly broken stones are a constant snub to pilferers." ("Burrowing Rodents," 1:111) *Eastern moles and mice must not be as tough as western ones, judging by the incursion of these pests into my Oregon rock garden.* —Ed.

☛ [When planting a dry wall] see that the collar of the plant is placed just a little back of the edge upon which it is resting. When the wall is finished, it is carefully "chinked" by forcing small flat stones *under* the plants where necessary, and particularly at open joints. In climates where the winters are severe, the wall should be covered after the first really hard freeze. For a retaining wall a single covering of burlap hanging from the top is sufficient. This is to shade the frozen plants from the sun, which has a devastating effect on frozen foliage. An open wall may be protected with evergreen boughs or a light covering of salt hay held in place by wire netting. If such protection is given, it is seldom that any plants are lost. (Florens DeBevoise, "Planted Walls," 2:1-5)

☛ It is possible to do more harm than good in offering to the novice material and advice that can be successfully used in some particular locality, yet is wholly incompatible with his or her own. (Violet Niles Walker, "The Upper-Middle South Considers Rock Gardening," 2:14–15)

☛ If you wish to grow in your rock garden plants from higher up or further north, see to it that the surface material is reasonably pale in color to reflect the sun's rays, that there is something to cast shadows of moderate height, and that there is a never-failing supply of moisture evaporating at the surface. (Edgar T. Wherry, "Keep Them Cool," 3:33)

☛ After trying various sterile media, such as sifted ashes, baked soil, and mica, I finally discovered a seeding substance easy to work and maintain, free from damping off, practically weed-free, and apparently congenial to many various types of seeds. This is ground-up sphagnum moss, not the commercial peat moss, but the green growing moss of swamps and bogs. This can be used as a 2- to 3-inch layer on top of a soil mixture, or for the whole content of the pot. The seeds are scattered directly on the surface. A shade glass over the container is beneficial until germination takes place. The sphagnum holds a quantity of moisture without being soggy; the surface must not be permitted to dry out, however, as it tends to form when dried an impervious crust. (H. Lincoln Foster, "Seed Sowing Media," 3:61) *Ground sphagnum is sold in small bags in many garden centers. It must be moistened before use, and should be handled with rubber gloves as it can harbor pathogens. It is particularly good for germinating Meconopsis.* —Ed.

☛ When we feel sure that the first few rocks are set into the proper patterns, we ram the mixed soil underneath with the blunt end of a board, carefully packing all spaces to avoid air pockets. Wherever hollow spaces are left under rocks, the soil will dry out and our plants will suffer. Also, mice and chipmunks will find lodgings in such places and often do considerable damage. (A. C. Pfander, "Rock Garden Construction," 5:18–23) *Don't offer them dens. Once, while I was guiding a tour of my rock garden, my Malamute bitch leapt into a large shrub draped over a rock, excavated rapidly, and unearthed a whole litter of rabbits just at the cute stage, which she quickly devoured before the aghast visitors.* —Ed.

☛ Planting must never be attempted either when soil is in such a sodden condition that it will stick to the trowel, or, conversely, when the soil is powder dry. All plants must be watered in thoroughly after planting. The rock garden should be top-dressed every spring to counteract the effect of winter rains and frost and provide some nourishment for the plants. I prefer a mixture of one part soil, one part leaf mold, and one part cinders screened through a ¼-inch sieve. The entire surface of the garden should be examined minutely and any exposed roots or offshoots carefully covered. Where new crevices have been formed by movement of the rocks during winter they should be filled firmly. Many tufted plants will benefit by having some of the top dressing carefully

teased in among the rosettes. (Louis P. Politi, "Rock Garden Planting and Care," 5:24-29)

☛ We constructed a table, 5 feet square, in the center of our alpine house, and nailed boards about 8 inches high around it. Here every winter we build up and plant a miniature rock garden. The drainage is excellent, and the plants thrive much better than if they were kept in pots. Moreover, if an equal number of plants were put in pots and placed on the benches, they would require considerably more space. We have found that it is inadvisable to plant our garden too early in the fall. If left outdoors, possibly in a cold frame, and given a resting period before being brought indoors, they bloom much more profusely. If brought in early in fall, they seem to thrive vegetatively at the expense of some bloom. This year [in Ohio] we didn't start to plant the garden until the first week in January. (Robert M. Senior, "The Alpine House," 5:100-101)

☛ Some of our concrete greenhouse benches [in Seattle] are 8 inches deep, with the bottom sloping to the center and a drain running out of one end which is lower than the opposite end. I began a scree in one bench with 2 inches of rubble (actually potsherds), then followed several inches of soil mixture consisting of one part vermiculite, one part peat moss well soaked, one part coarse sand, and two parts rich but sandy compost. When all the plants had been set, a half-inch covering of shale, brought down from the Olympic Mountains, was scattered over the bare surface and close to the plants. The soil level was varied to make the effect more interesting. (Frances Kinne Roberson, "An Indoor Scree Venture," 6:4-6) *Roberson successfully grew a number of Northwest high alpinus thus, including Campanula piperi and Douglasia laevigata.*

☛ Except for seeds known to be tender, cold conditions are more satisfactory than a warm greenhouse, for the alternative frost and thaw have a beneficial effect, especially on gentians, androsaces, and high alpine campanulas. A tall airy house is preferable to a close, airless house or frame. I arrange for a draught of air to pass over the pans, keeping the surface dry which prevents the seedlings from damping off and also prevents moss. (Stuart Boothman, "Raising Rock Plants from Seed," 6:65) *Actual freezing is now thought to be detrimental to many kinds of seeds, though "moist chilling" is necessary for some to germinate.*

☛ The writer is constantly hearing about pan [i.e., trough] gardeners in the industrial cities of England, who grow plants he would hesitate to recommend on grounds of difficulty. The only rule seems to be that any alpine which is small and neat will flourish, provided the owner is sufficiently enthusiastic. (Lawrence D. Hills, "The Miniature Alpine Garden," 6:96-99)

☛ The wise gardener will go around with a few empty packets and a pencil, for once seeds start to fall, they usually waste little time in completing the job. If one cannot be at hand at the crucial moment, it is well to go around the garden,

plucking and opening a seed pod here and there. If the seeds seem brown and are fairly hard, they can be picked with assurance of complete development even before the capsule has shown signs of bursting.

If the seeds do not fall freely, it is best to pick the entire stalk rather than individual capsules. These stalks should be placed head foremost in a paper bag and hung in a dry place until the seeds are fully ripe, at which time a good share of the seeds will have found their way to the bottom of the sack. In dry weather, the bags and envelopes may be set in a box anywhere they will not be rained on, until ready to be cleaned. In more humid climates, they should be hung in a moderately warm, dry place, such as an attic. If at all damp when gathered, they will mold unless spread out thinly to dry.

Thorough cleaning of the seeds is, unfortunately, more than a mere virtue. Pots sown with seeds mixed with debris have an appalling tendency to mold on the surface. (C. R. Worth, "Seed Collecting in Garden and Wild," 7:19-22)

☛ Mosses [other than *Sphagnum*], living ones, have long helped me grow seedlings of rhododendrons and other ericaceous and shade plants, and with a minimum of attention. Ideal for this purpose is *Leptobryum pyriforme*, while *Dicranella rufescens* and *D. varia* may also be useful. The seed pots are placed in conditions which invite the favorable mosses. After scattering the seeds very thinly, a slight sifting is added of just enough sand to anchor the seeds but not to cover them, but this is hardly necessary, as the seeds stick to the wet surface [of the seed mix], which is never permitted to dry out. Pots are now placed in pans containing about a quarter inch of water, in a shaded frame. The moisture must be carefully regulated. By July or August the desirable mosses have usually made growth enough to stop the damping almost entirely, larger moss species have been weeded out, and there is little further loss. Most seedlings remain in the original pots through the winter, to be potted off early in March. (G. G. Nearing, "Mosses Useful in Propagation," 12:16-20)

☛ If not all the seeds sown this spring of alpines and other perennials have germinated, *do not* throw away the seed pots for at least another year. There is no forecasting how alpine seeds will behave. It seems clear from the results of this season that sowbugs, for which we have never found any adequate weapon, have destroyed many ungerminated seeds in the past; this year, sown in fruit jars [pre-treated with a powerful fungicide and then sealed], the seeds were safe from these pests, and we are much richer in tiny alpines. (13:94)



From the President

Dear NARGS Friends,

It's the end of July as I am writing this, and things are pretty busy, organizationally speaking.

Most of the work this summer revolved around the website. I'm happy to say that almost all chapters have web presence these days. For those chapters that didn't have their own websites, Hugh MacMillan, NARGS website creator and webmaster, created web pages. At this point there are 16 of them, and we are waiting for one last chapter to send in information for its web page.

If you are looking at "Local Chapters" on the NARGS website, www.nargs.org, be sure to get all the way to the Chapter Map, which is at the bottom of page 2. If you click on one of those little red squares signifying individual chapters, you'll be immediately taken to that Chapter's website or web page. This is something Hugh programmed for our convenience.

Speaking of convenience, the website now contains documents that previously were not easy to find. For the NARGS Awards recipients list, NARGS Awards; 1997 to Present, look under "Board and Committees," and then "Award Committee." For the comprehensive, newly revised "Meeting Planning Guidelines," look again on the "Board and Committees" page, under "Meeting Planning."

There is much to happen on the website between now and when you see this message in October. Both the Wiki and the Photo Gallery teams are coming with their announcements, and the Discussion Forum is expected to open by the end of August.

Perhaps the biggest and most important task ahead of us is finding the new *Quarterly* Editor. Jane McGary has given us nine years of impeccable service and is now ready to move on. Are you qualified and interested in this paid position? If so, contact the Editor Search Committee under the e-mail address specified elsewhere in the Bulletin Board.

I saved a nice surprise for the end: NARGS has a new chapter! On July 13, 2009, the Administrative Committee formally approved the Fells Chapter. The

Fells Chapter is associated with The Fells Garden in Newbury, New Hampshire www.thefells.org and was spearheaded by Thelma Hewitt, a Fells supporter and NARGS Life Member. Thelma and her group are so well organized that at their inaugural meeting, the chapter has already approved its new Bylaws—possibly the first such occurrence in NARGS history.

I'm looking forward to a productive fall in NARGS!

Grazyna Grauer
President

Canadian and Overseas Seed Donors, Please Read This!

To Canadian and overseas donors to the NARGS Seed Exchange:

We have been advised, by an APHIS Inspector, of problems with shipments of seed entering the U.S. under the Small Lots of Seed permit. The seeds themselves seem to be fine, but the packaging and labeling have not met all of the Conditions on the Small Lots of Seed permit.

We want to be certain that all your hard work, collecting and cleaning seeds, is not in vain and that your seeds find their way into the Seed Exchange. So please take a moment to read and follow these guidelines, as well as the instructions on pages 2 and 3 of the Small Lots of Seed Permit (which you received with the summer issue of the *Quarterly*”).

Every packet of seed must be labeled with the exporter's name, the name of the seed, and the country of origin. The NARGS Donation Form was sent with the summer issue of the *Quarterly*, or you can download it from the Seedex page of the NARGS website. The Form says: “Unless otherwise stated, all seed originated in the donor's country,” so if all of the seed you are donating is from your country (though not necessarily from one site), it is covered by this blanket declaration. If you do not use the NARGS Donation Form, please write at the top of your Invoice: “Unless otherwise stated, all seed originated in the donor's country.” This will save you from having to write your country's name on all the individual packets of garden-collected seed. However, all wild-collected seed will need to have the country of origin noted, on each packet and on the Donation Form or Invoice. Please be aware that it must be the name of a country, not simply a mountain range or a region (e.g.: China, not Tien Shan; Tadjikistan, not Pamir Mountains).

Seal the seed packet securely! Tape, or fold down the corners to prevent leaks. Open packets are simply not allowed entry into the U.S.; seed can leak out and into other packets, and bugs and contaminating debris can get in. Such packets (indeed, the whole shipment) could be destroyed at the Inspection Station.

The Invoice/Donation Form is equally important. Use the donation form or a clean sheet of paper, and type (or print legibly) the full names of all the taxa in your shipment—in alphabetical order, please. Be sure that your name and

address are legible, at the top. Add any information you care to write about collection numbers, or characteristics of the plant, but be sure to write the country of origin for each taxon of both garden- and wild-collected plants—or the alternative blanket statement covering all taxa (as mentioned above).

Please note that Condition #7 on the permit allows you to send 50 seeds OR 10 grams, whichever is **more**.

Send no more than **50 packets of seed** in each shipment, although multiple shipments are certainly welcome. Request additional Donation Forms, permits, mailing labels from the Seed Intake Manager (see below). And, of course, make certain that none of your seeds are on the list of restricted or prohibited taxa:

http://www.nargs.org/index.php?option=com_content&view=article&id=119:restricted-seed&catid=75:seedex&Itemid=123

If you did not receive a NARGS Donation Form, Instructions for sending donations, the Small Lots of Seed permit (3 pages), or the green & yellow mailing label, please contact the Seed Intake Manager: Laura Serowicz, 15411 Woodring, Livonia, MI 48154-3029 U.S.A., seedintake@twmi.rr.com

The Small Lots of Seed permit was created to allow organizational seed exchanges to continue to function, without donors having to obtain an expensive, time-consuming phytosanitary certificate. If we all follow the conditions of the permit, seed exchanges can continue to thrive and serve our members.

Please help package seeds for the Seed Exchange!

The NARGS Seed Exchange needs people to help out with the second phase: repackaging seeds.

We already have some people—working singly, in small groups, in chapters—who have volunteered to help. We need several more, in order to repackage the 4,000 taxa of seed that we are expecting to receive. This job entails dividing the donated seed into smaller packets, with the number of packets based upon the number of requests last year and the amount of seed donated this year. You will be given complete and clear instructions, as well as all necessary supplies. A few chapters have a packaging party, where members spend a day together, learning, chatting, working. Some members take extra seed home, to package while watching TV or listening to music. It's all quite easy, enjoyable, and rewarding.

Your reward will be the thanks of all seed lovers, plus priority status for your own seed requests, when fulfillments begin in January.

If you can help—by yourself, or by organizing others—please contact:

Joyce Fingerut

Seed Exchange Director

860-535-3067

alpinegarden@comcast.net

Persons who joined NARGS between May 7 and July 31, 2009

Agnew, Karen, 84 Prechtl Rd., East Barre, VT 05649
Baker, Bill, PO Box 372, Millersburg, OH 44654
Budros, Jim, 1801 Waterkark Dr., Ste. 300, Columbus, OH 43215
DeGolyer, Sandra, 4465 Lake Dr., Canandaigua, NY 14424
Dustman, Elmer & Joyce, 26 Peachtree Ln., Pittsford, NY 14534
Etscheid, Beth G., 19556 47th Ave., NE, Lake Forest Park, WA 98155
Follweiler, Laurie, 2075 Palm Ave., Pittsburgh, PA 15235
Ford, Caroline, PO Box 200, New Vernon, NJ 07976
Groshong, Nancy, 997 Palmetto Ave., Chico, CA 95926
Orlowski, Remy, 978 Riverview Blvd., Tonawanda, NY 14150
Palmer, Janice, 1800 US 70W, Hillsborough, NC 27278
Rodgers, Jr., Thomas M., PO Box 725467, Atlanta, GA 31139
Sayce, Kathleen, PO Box 91, Nahcotta, WA 98637
Schwartz, Daniel, PO Box 254, Nassau, NY 12123
Sheehan, Mark & Kathy, 1703 Waneka Lake Tr., Lafayette, CO 80026
Simonds, Bruce D., 57 Spencer Ave., Guilford, CT 06437
Cochrane, William, 9/30 William St., Castlemaine, Victoria 3450,
AUSTRALIA
Schroedersecker, Toronto, ON, CANADA

The following became NARGS Life Members between Nov. 1, 2008 and July 31, 2009:

Marta McDowell (New Jersey)
Kenneth Karb (North Carolina)
Cynthia Reed (South Dakota)
Sten Beckman (Sweden)
Jeung Ju Yi (Japan)
Masahiro Wakahara (Japan)

There are currently 253 Life members of NARGS.

Member's donation to NARGS

A donation has been given to NARGS by **Grazyna Grauer** in memory of **Marnie Flook** and the service she provided as archivist to NARGS for many years.

Membership Directory

NARGS no longer prepares a print copy of the membership directory. If you would like an electronic copy of the membership list, provided as a PDF file, email a request to nargs@nc.rr.com.



NARGS COMING EVENTS

2010 Eastern Winter Study Weekend: March 19–21, 2010
Devens, Massachusetts, hosted by the New England Chapter
Contact: Rosemary Monahan, rosemonahan@comcast.net

2010 Western Winter Study Weekend: March 4–7, 2010
Medford, Oregon, hosted by the Siskiyou Chapter
Contact: Kathleen Pyle, kmpyle2@yahoo.com

2010 Annual General Meeting: July 11–15, 2010
Salida, Colorado, hosted by the Rocky Mountain Chapter
Contact: Randy Tatroe, rltaurora@aol.com

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NARGS **EASTERN WINTER STUDY WEEKEND**

3.19-3.21

Join us March 19-21, 2010 in Devens, Massachusetts to hear about terrific new plants for your garden; learn design principles you can use to make your garden more interesting and pleasing; buy great plants; enter a plant show; and mingle with other obsessed gardeners. Devens, Massachusetts is the new town on the site of the former Fort Devens, 30 miles west of Boston.

Featured speakers include:

Gordon Hayward, author and garden designer, on the uses of stone in the garden.

Jan Sacks and Marty Schafer, proprietors of Joe Pye Weed's garden and Iris breeders, on small Irises.

Lauren Springer Ogden and **Scott Ogden**, authors and garden designers, on plant-driven garden design.

Bill Cullina, author and plant & garden curator, Coastal Maine Botanical Garden, on Trilliums.

Darrell Probst, horticulturist and plant breeder, giving two talks; one on new introductions of Astilbes, Coreopsis, and more; and the other on Epimediums from the wilds to the garden.

Sally and John Perkins, Rhododendron experts, on ericaceous plants for the rock garden

Jeff Good, landscape director of The Fells, Newberry, NH, on design and restoration of the rock garden at The Fells.

You'll also choose 2 of these 3 workshops:

1. Discussing the Design Process. **Lauren Springer Ogden** and **Scott Ogden**
2. Propagation of Trilliums. **Bill Cullina**
3. Sturdy, Reliable Plants for the Rock Garden. **Mike Slater**, NARGS Recording Secretary

In addition to lots of vendors selling great plants we'll have a plant show, and we encourage newcomers as well as experienced plant show participants to enter.

For further information, contact Registrar Vivien Bouffard (vbouffard55@msn.com) or Chair Rosemary Monahan (rosemonahan@comcast.net or 978-568-1780).

Hotel Information: The meeting will be held at the Marriott Spring Hill Suites/Devens Common Center in Devens, Massachusetts. For rooms, register directly with the hotel: 1-888-287-9400 or on-line at <http://cwp.marriott.com/bossd/argc/> Be sure to mention that you're registering as part of the block reserved for the New England Chapter of the North American Rock Garden Society. Conference rates are \$119 plus tax. Reservations must be made by February 18, 2010. For information on how to reach the hotel and conference center by shuttle or transit, contact Registrar or Chair.

Registration. Clip and mail registration form on next page. Cancellations are subject to a \$25 processing fee. No refunds will be made after February 18, 2010.

**2010 NARGS Eastern Winter Study Weekend
Devens, Massachusetts • March 19-21, 2010**

Registration Form

Please print name as it is to appear on your nametag:

Name #1 _____

Name #2 _____

Street address _____

City, State/Prov., Zip/Postal Code _____

Registration Fee (includes breakfast, lunch, and banquet dinner on Saturday and breakfast on Sunday)

Received by February 1, 2010..... \$ 250 each

After February 1, 2010..... \$ 275 each

Optional Friday dinner \$ 45 each

Total enclosed \$ _____

Cancellations are subject to a \$25 processing fee. No refunds will be made after February 18, 2010.

Check your Saturday banquet choice(s) here:

Registrant #1: fish _____ chicken _____ vegetarian _____

Registrant #2: fish _____ chicken _____ vegetarian _____

Check your optional Friday dinner choice(s) here:

Registrant #1: fish _____ chicken _____ vegetarian _____

Registrant #2: fish _____ chicken _____ vegetarian _____

Check: please make payable to *New England Chapter, NARGS.*

Credit card: Visa _____ Mastercard _____ Amex _____

Number _____ Exp date _____ 3 digit code _____

Mail to: Vivien Bouffard, 55 Gay Street, Norwood, MA 02062



Potentilla tridentata. Drawing by Doretta Klaber.



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to the Suburbs”

March 5-7, 2010 — Medford, Oregon

Hosted by the
Siskiyou Chapter of NARGS





2010
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WINTER
STUDY
WEEKEND



Learn Discover great plants, and sow the seeds of friendships you'll enjoy for a lifetime. Our conference speakers will entertain you on the trail, as we armchair hike the mountain ranges of the Pacific Northwest, — including Oregon's Elkhorn Mountains —and the Sierras, then explore the Dolomites, Altai, and beyond. You'll hear expert advice on growing alpine gems from around the world, and find out those most likely to adapt successfully in your garden. We'll also shop for plants, feast, and have fun all weekend long.

Discover Don't miss this unique, once-in-a-lifetime opportunity to experience a Western Winter Study Weekend in the Rogue Valley, gateway to the Klamath-Siskiyou ecoregion.

Relax The Medford Red Lion, our host hotel, offers top-notch customer service at excellent rates of \$71 single or double, \$81 triple and \$91 for a quadruple room. Call 541-779-5811 or 1-800-RED-LION and mention NARGS when making your reservation.. The hotel is conveniently located in downtown Medford, not far from the I-5 and the Rogue Valley Airport.



Confirmed speakers include:

Jim Archibald - In Search of the Garden Worthy: Far-Flung Seed Expeditions

Mark Turner - Alpine Scenes from the Pacific Northwest

Frank Callahan - Serpentine Plants from Oregon's Elkhorn Mountains, the Klamaths and Sierras

Rick Lupp - Dazzled by Daphnes

Alan Grainger - In the Dolomites; Trough Garden Treasures

Nevin Smith - Propagating Small California Native Shrubs

Mike Bone - The Mt. Goliath Garden Project; An AGS Trek to Kazakhstan and the Altai Mountains

NORTH AMERICAN ROCK GARDEN SOCIETY

Annual Financial Report

For Years Ending December 31, 2008 and 2007

Respectfully submitted, Randy L. Tatroe, Treasurer
August 10, 2009

Introduction and Summary

The North American Rock Garden Society, Inc. (NARGS, or the Society) is a not-for-profit organization founded in 1934 and incorporated in New Jersey in 1943 as the American Rock Garden Society. Its present name was established in 1994. The Society encourages and promotes the cultivation, conservation, and knowledge of rock garden plants. To further these objectives, it publishes the Rock Garden Quarterly, supports local Chapters who host several major conferences each year, and supports the publication of books on the subject of rock gardening and rock garden plants. The Society also promotes the knowledge of rock gardening through numerous other activities, such as operating a book store and slide library, awarding grants to projects related to its aims, and providing internships to educational institutions involved in subjects related to rock gardening. The Society promotes cultivation and conservation through its operation of a world-wide seed exchange program. Educational endeavors include a program to bring foreign experts to this country for extended lecture tours for the Society's chapters, and a Program Resource Center to identify suitable and recommended speakers to chapter heads for local meetings. A program to sponsor botanical expeditions within the US was initiated in 2001. In 2006, the Society hosted the International Interim Rock Garden Plant Conference at Snowbird, Utah, in conjunction with the Wasatch Chapter, as well as a post-conference expedition to the Big Horn Mountains of Wyoming. These activities are described on the NARGS Web site (www.nargs.org), along with much other information and illustrations. Financial support for these activities comes primarily from membership dues, contributions, book sales, charges for services, and interest and dividends earned on the Society's investment pool.

The investment funds consist of three restricted funds and one unrestricted fund. Restricted Funds are the Norman Singer Endowment Fund, the Carleton R. Worth Award Fund, and the Robert Senior Award Fund. Unrestricted Operating Reserves principal is available for operations, and income from this fund is used for the general purposes of the Society. The Singer Endowment Fund income is available for grants approved by the Board of Directors. Recent projects have included construction and renovation of rock gardens and studies of rock garden plants and habitats. In recent years the Society has awarded grants in excess of this Fund's income; this excess has been paid from the unrestricted funds of the

Society. The Carleton R. Worth Fund income goes for cash awards to authors of noteworthy rock garden publications. The Robert Senior Award Fund was created by the Ohio Valley Chapter in memory of Robert Senior; its income is used to finance awards for outstanding exhibits of campanulas.

The financial records of the Society generally are maintained on a cash basis, recognizing income when it is received and expenses when they are paid. Investments (CD's and bonds) are recorded at their face value, not their market value, reflecting the Society's practice of holding them to maturity. Book Service and Seed Exchange inventories are stated at cost.

The accounts of the Book Service, the Seed Exchange, and the Slide Library are maintained primarily by the managers of those services, and are audited separately, as is the deposit account maintained by the Executive Secretary for membership dues and some other receipts. The accounts of the Society presented here are the consolidated results of all the Society's operations.

The Society's financial condition remains strong, with unrestricted reserves equal to about 1-1/2 times annual disbursements. Total assets have declined from a high of \$500,000 in 1999 (see page 4) due mainly from a continuing decline in membership numbers. Membership at the end of 2008 was 2881, down 10% from end of 2007.

2008 Audit Report
Grazyna Grauer, President, NARGS
5640 Windwood Dr.
Dublin OH 43017

Dear Ms. Grauer,

I have examined the NARGS financial records maintained by the Treasurer, Randy Tatroe. The records, including the consolidated statements of NARGS and affiliated operations are complete and are being maintained in accordance with accepted accounting standards. I have examined the bank statements, deposit records, and balances for the 2008 calendar year.

The two issues noted in last year's audit letter have been resolved.

In my opinion, the report of Assets, Liabilities and Equity accurately reflects the financial status of the North American Rock Garden Society as of December 31, 2008.

This audit does not include records maintained in the office of the Executive Secretary, Seed Exchange, Slide Library or Book Service, only the results as reported to and reviewed by the Treasurer.

Sincerely Yours,
William Adams
330 Carlile Ave.
Pueblo CO 81004-1054

Summary Balance Sheet

| | <u>12/31/2008</u> | <u>12/31/2007</u> |
|-------------------------|-------------------|-------------------|
| | (000) | (000) |
| <u>Assets</u> | | |
| Cash in Banks | | |
| NARGS Accounts | \$ 47.4 | \$ 44.8 |
| Book Service | 0.5 | (1.8) |
| Seed Exchange** | 0.0 | 0.6 |
| Slide Library | <u>0.5</u> | <u>0.2</u> |
| Total Cash in Banks | \$ 48.4 | \$ 43.8 |
| Advances to Affiliates | (22.5) | (25.2) |
| Investments (CD's) | 383.0 | 386.0 |
| Inventories | | |
| Book Service | \$ 10.6* | \$ 16.4 |
| Seed Exchange | <u>0.0**</u> | <u>2.9</u> |
| Total Inventories | <u>\$ 10.6</u> | <u>\$ 18.7</u> |
| Total Assets | <u>\$ 419.5</u> | <u>\$ 423.9</u> |
| <u>Equity</u> | | |
| Restricted Funds | | |
| Norman Singer Endowment | \$ 149.3 | \$ 149.3 |
| Carleton Worth Award | 3.3 | 3.3 |
| Robert Senior Award | <u>1.3</u> | <u>1.3</u> |
| Total Restricted Funds | \$ 153.9 | \$ 153.9 |
| Retained Earnings | 282.3 | 309.3 |
| Net Income | <u>(16.7)</u> | <u>(39.3)</u> |
| Total Equity | <u>\$ 419.5</u> | <u>\$ 423.9</u> |

*Does not include 4th Quarter 2008 results

**SeedEx glassine inventory reclassified as supplies

Operating Accounts

| | <u>2008</u> | <u>2007</u> |
|--|------------------|------------------|
| | (000) | (000) |
| <u>Gross Receipts</u> | | |
| Annual Dues and Life Memberships | \$ 89.2 | \$ 75.6 |
| Book Service Gross Sales | 10.6* | 18.4 |
| Seed Exchange Receipts | 6.4 | 10.4 |
| AGM and Study Weekend Receipts | 13.2 | 0.0 |
| Interest | 19.9 | 18.4 |
| Other, primarily Contributions, Royalties, and Advertising | <u>2.5</u> | <u>11.9</u> |
| | \$ | |
| | 139.3 | \$ 134.7 |
| <u>Disbursements</u> | | |
| Rock Garden Quarterly | \$ (77.8) | \$ (74.4) |
| Other Membership Pub. (Mbrshp Dir., BB, etc.) | (0.0) | (1.2) |
| Book Service Costs | (21.1) | (32.5) |
| Seed Exchange Costs | (15.0) | (14.7) |
| Expeditions Costs | (0.0) | (0.0) |
| Speakers Tour | (8.3) | (8.3) |
| Endowment Grants | (8.0) | (8.8) |
| Meeting Stipends and Awards | (2.7) | (1.2) |
| Administrative Expenses/Study Weekends | (39.8) | (42.9) |
| Other, primarily SeedEx Forms/Database and Web Development | <u>(6.1)</u> | <u>(0.7)</u> |
| Total Disbursements | \$ (178.8) | \$ (185.7) |
| <u>Changes in Inventories</u> | | |
| Book Service Inventory* | \$ 0.3 | \$ 0.6 |
| Seed Exchange Glassine Envelopes | 0.0 | 0.0 |
| Advances to Chapters | <u>22.5</u> | <u>22.0</u> |
| Net Inventories and Advances | <u>\$ 22.8</u> | <u>\$ 22.6</u> |
| | <u>\$ (16.7)</u> | <u>\$ (26.8)</u> |

Comments on Results

A result for 2008 was a positive inflow of \$1,400 compared with a loss of \$39,000 in 2007. Both the Eastern Winter Study Weekend (EWSW) and the Annual General Meeting (AGM) had positive net incomes. A NARGS chapter did not host the Western Winter Study Weekend (WWSW).

Major Programs Results

| | <u>2008</u> (000) | <u>2007</u> (000) |
|-------------------------|----------------------|----------------------|
| <u>Book Service*</u> | | |
| Gross Sales | \$ 9.8 | \$ 29.5 |
| Cost of Books Purchased | (9.3) | (15.8) |
| Operating Expenses | (21.1) | (16.5) |
| Change in inventory | | <u>1.0</u> |
| Net (Cost) | <u>\$ (20.6)</u> | <u>\$ (2.0)</u> |
| <u>Seed Exchange</u> | | |
| Gross Sales | \$ 6.4 | \$ 10.4 |
| Operating Expenses | (19.2) | (10.5) |
| Net (Cost)/Contribution | <u>\$ (12.0)</u> | <u>\$ (0.1)</u> |
| <u>Expeditions</u> | | |
| Registrations | \$ 0.0 | \$ 0.0 |
| Operating Expenses | 0.0 | 0.0 |
| Net (Cost)/Contribution | <u>\$ 0.0</u> | <u>\$ 0.0</u> |

Comments on Results

***Book Service** results do not include 4th quarter sales or actual inventory amount. Overall, book sales were down for 2008.

Seed Exchange: Some costs from 2007 recorded in 2008 (\$2.6 for seed packets and \$1.6 for postage) were reallocated to 2007.

Expeditions: There were no expeditions in 2008.

Study Weekends and Annual General Meeting: The Eastern Winter Study Weekend (EWSW) was held in Connecticut and the Western Winter Study Weekend (WWSW) was held in Vancouver BC. The Annual General Meeting (AGM) was held in Ottawa Canada. Both the EWSW and the AGM were financial successes, due mainly to the hard work and commitment of the planning committees.

Restricted Funds Reconciliation

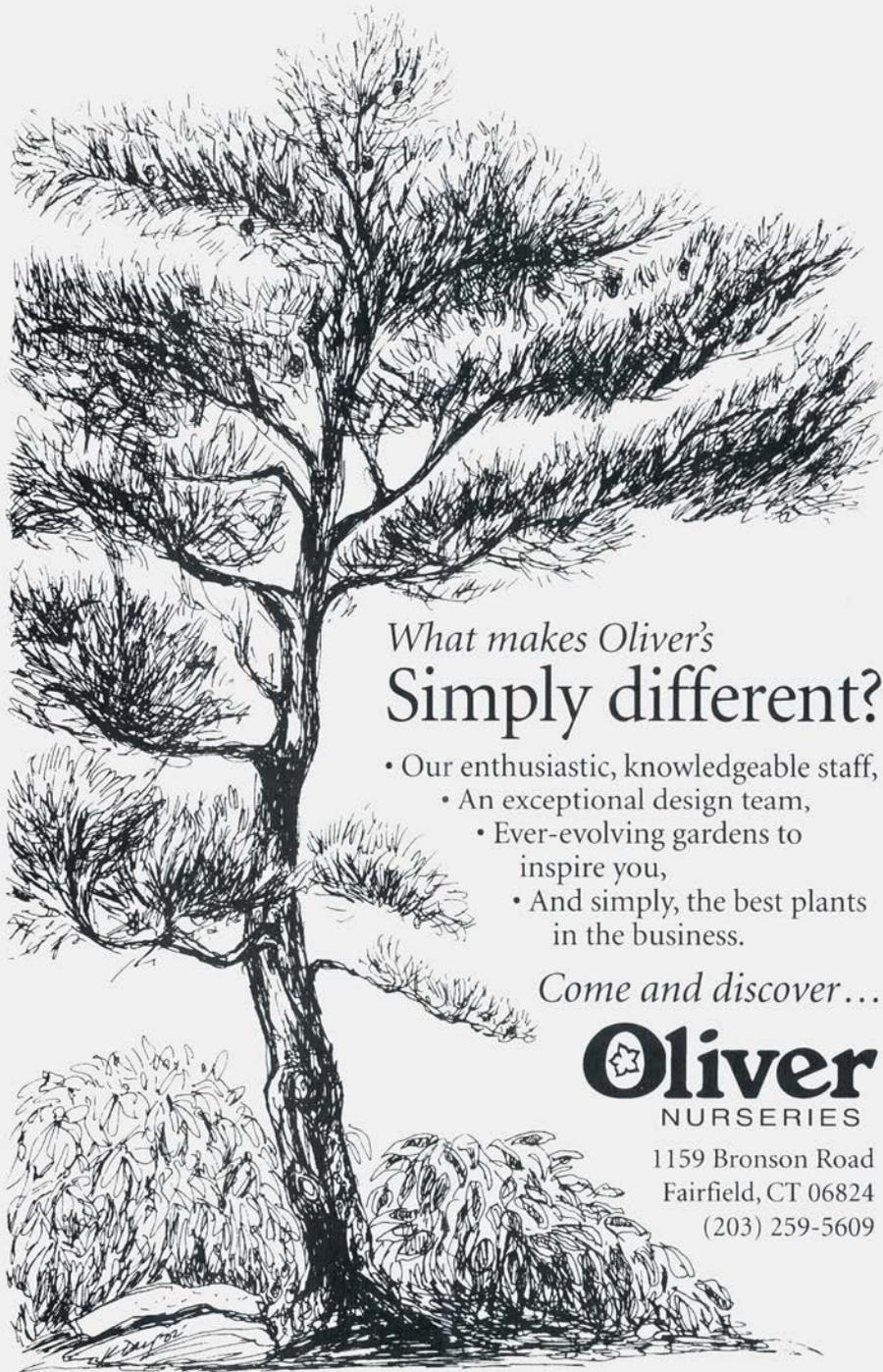
| | <u>2008</u> (000) | <u>2007</u> (000) |
|-------------------------------------|----------------------|----------------------|
| <u>Norman Singer Endowment Fund</u> | | |
| Balance at 1/1 | \$ 149.3 | \$ 149.3 |
| Contributions | 0.0 | 0.0 |
| Share of Investment Earnings | 5.6 | 5.6 |
| From Operations Reserves for Grants | 0.0 | 2.9 |
| Grants | <u>(8.0)</u> | <u>(8.8)</u> |
| Balance at 12/31 | <u>\$ 149.3</u> | <u>\$ 149.3</u> |
| <u>Carleton Worth Award Fund</u> | | |
| Balance at 1/1 | \$ 3.3 | \$ 3.3 |
| Share of Investment Earnings | <u>0.0</u> | <u>0.0</u> |
| Balance at 12/31 | <u>\$ 3.3</u> | <u>\$ 3.3</u> |
| <u>Robert Senior Award Fund</u> | | |
| Balance at 1/1 | \$ 1.3 | \$ 1.3 |
| Share of Investment Earnings | <u>0.0</u> | <u>0.0</u> |
| Balance at 12/31 | <u>\$ 1.3</u> | <u>\$ 1.3</u> |

Comments on Funds Results

Norman Singer Endowment Fund received no contributions in 2008. In 2008, the Board approved grants totaling \$8,000: \$2,000 to the JC Raulston Arboretum in Raleigh NC for a rock/scree roof-top garden; \$2,500 to the Berry Botanic Garden in Portland OR to improve the irrigation system, resurface gravel paths and add new plant material; \$1,500 to the Oregon School for the Blind in Salem OR to renovate the entrance area to the Sensory Garden to a rock/alpine garden; and \$2,000 to the Spencer Crest Nature Center in Corning NY for a rock garden around a pavilion. In 2008, the amount of the grants essentially equaled the amount of interest earned from investments of the Norman Singer Endowment funds.

Editor Search

NARGS is looking for an Editor to solicit and develop content relative to many diverse aspects of our interests as both novice and expert members, and to attract new members. This candidate's main task would be to define the journal by making it exciting and informative in quality writing, editing & printing, and above all, using quality color throughout the text to best illustrate the subject at hand. We want a journal that would also be interactive with our new website. This is a paid position. Persons interested should send their intent and qualifications to the Editor's Search Committee: nargseitorsearch@verizon.net



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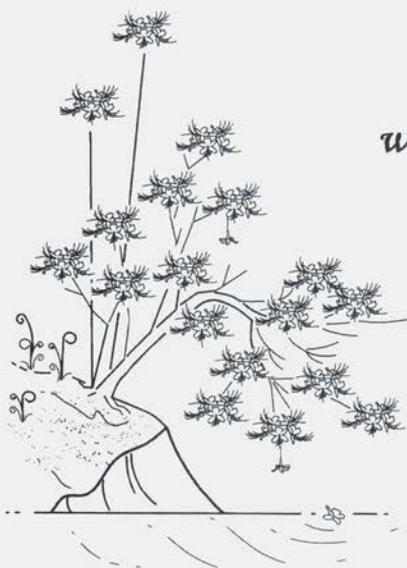
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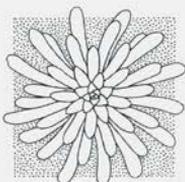


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